TEXTILE BULLETIN

Vol. 51 NOVEMBER 26, 1936 No. 13

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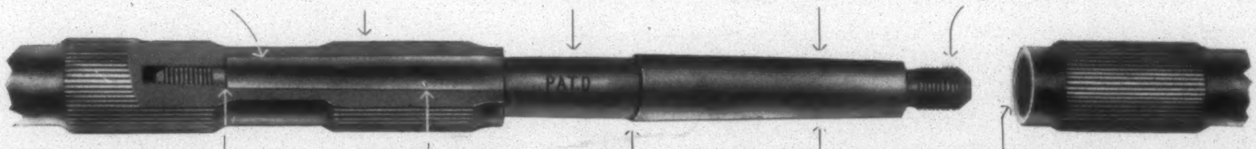

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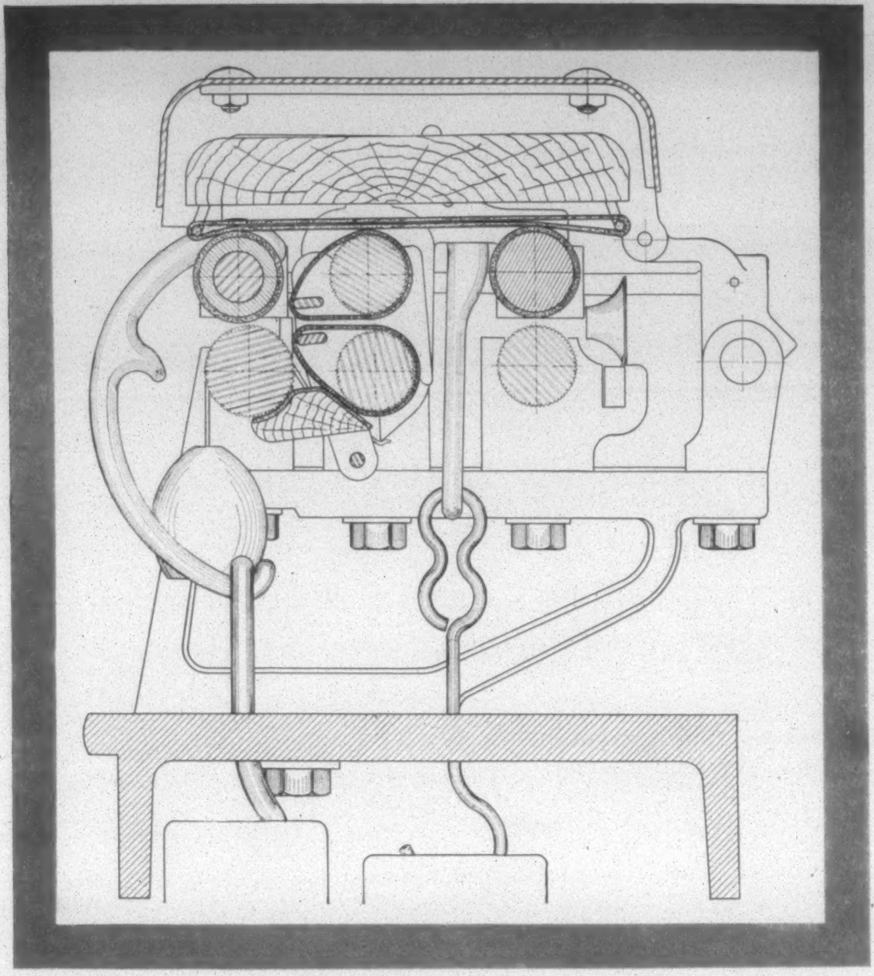

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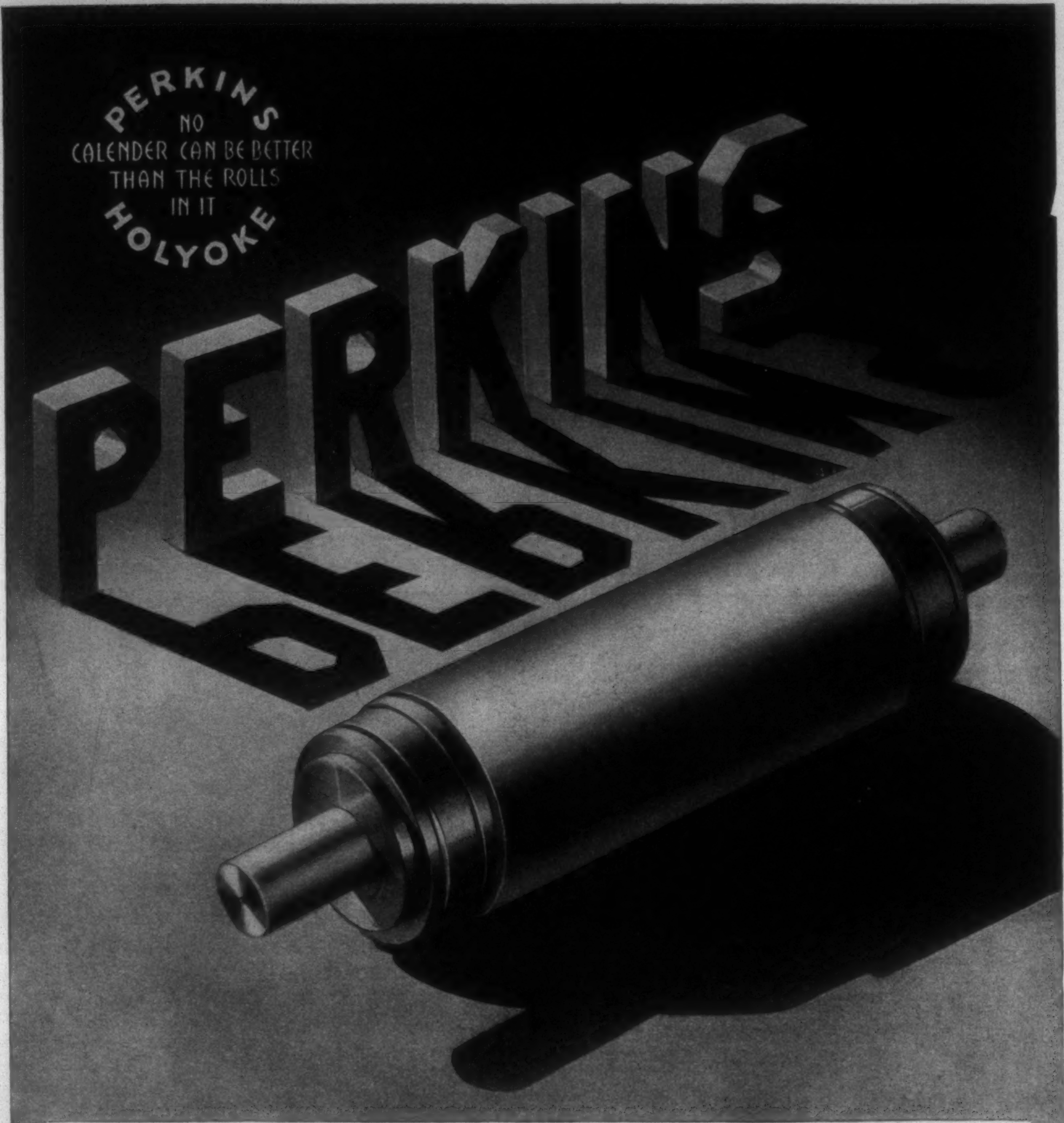

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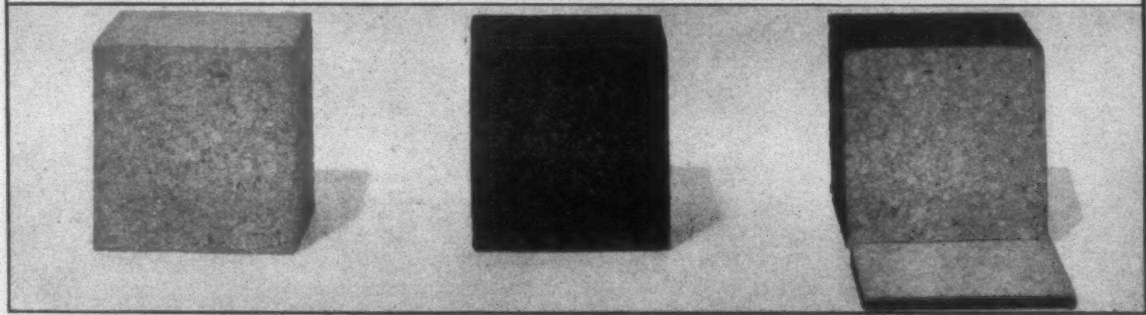
"BEFORE AND AFTER" Pictures prove cork's high resistance to Liquid Penetration



1. *A block of Armstrong's Cork Composition before it was boiled in an alcoholic solution of nigrosine dye.*

2. *View of the same block after it had been boiled in the dye solution for twenty-four hours.*

3. *Cross section showing a slight penetration of the liquid between the cork granules but not through them.*

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Vol. 51 November 26, 1936 No. 13

Spun Rayon*

By H. W. Rose

The Viscose Company

THE tremendous increase in the use of spun rayon only within the past year in the United States makes the subject of more than usual interest at this time. What is spun rayon? What is cut rayon staple? What importance has it already assumed in the world, and what are the factors that bear on it? It is impossible, of course, in a talk of this kind to give more than the general outline of the answers. The subject is new and many of the answers are not yet known, but one thing is certain, and that is that experimenting, testing, and careful observance of technical detail and of economic factors make the difference between the success and the failure of spun rayon fabrics.

Spun rayon is yarn spun from staple lengths of rayon fiber as compared to rayon yarn, in which the filaments are continuous. The cut rayon staple is made from both viscose and acetate solutions, two of the four basic solutions of cellulose for making rayon. Viscose is by far the larger production of the two, as it takes a cotton dye and its use so far is mainly in the cotton type of spinning. As acetate staple takes a different dye from natural fiber dyes, it is used mainly to obtain cross-dye effects, such as in the heather mixtures and rabbit fur novelty yarns.

The manufacture of cut rayon staple is no different from that of filament rayon up to the spinneret. There the process becomes quite different. There is a spinning frame as in the making of rayon yarn, but each spinneret has possibly several thousand holes instead of a hundred or less. The spinnerets are all immersed in the coagulating bath but instead of the filaments being drawn off by individual spindles for each spinneret they are all collected and drawn off the entire spinning frame as a continuous tow.

At this point there is an option of two methods, wet-cutting and dry-cutting. In the wet-cutting system the tow is drawn off the spinning frame by rolls which feed it directly into a cutter which in turn chops the tow into staple length fiber. The raw stock is then desulphurized, bleached, washed, dried, run through an opener, conditioned, and baled. In the dry-cutting system the tow is desulphurized, bleached, washed, and dried, and then fed into a cutter in ribbon form and cut to staple length. The stock is run through an opener and baled. The degree of spinning in either system is important as too much opening might break fiber and make short lengths to give trouble and waste in subsequent spinning operations. Some opening is necessary to break up any adherence of fibers which may have come through in bunches.

The acetate process of making cut rayon staple is more simple, as acetate does not require the finishing steps necessary in making viscose rayon. When acetate is spun it is finished except for putting it into the form required by the consumer. All the ends spun on a frame are drawn off and fed through a dry cutter where they are cut to staple length, and then the stock is opened, if necessary, and baled.

There are several features of cut rayon staple that give it an advantage over the natural fibers. It is more versatile than any of them in that it can be controlled during manufacture in all of its specifications and is practically made to order for the spinner. It is made in various sizes of denier or fineness of fiber ranging from the finest cotton fiber to the coarsest wool or mohair fiber, and in fact can be carried beyond either of these limits.

The one and a half denier fiber is designed to correspond to the average cotton fiber size used in this country. The three denier corresponds to the harsher cottons such as Tanguish, Peruvian and the India and China cottons, and also to the finer wool and merino fibers. The five and a half denier corresponds to the regular wool and worsted fiber size averages. Heavier sizes are made to correspond to mohair, rabbit hair, and other coarse natural fibers. The three sizes mentioned have become practically standard and are in most general use in spun rayon.

The length of rayon staple is varied at will by regulating the cutting machine. In cotton spinning the standard length used is 1 7/16 or 1½ inches. That length is found to give the best strength with 1.5 denier and is used wherever mill roll settings can take the length. Shorter lengths of 1¼ and even 1-inch staples are used but blended with cotton for some particular purpose. Lengths from 2 to 7 inches are used in the various kinds of wool spinning and silk spinning systems.

Cut rayon staple can also be made in more than one luster. At present it is either bright or extra dull, but the semi-dull lusters could be spun into cut staple as well

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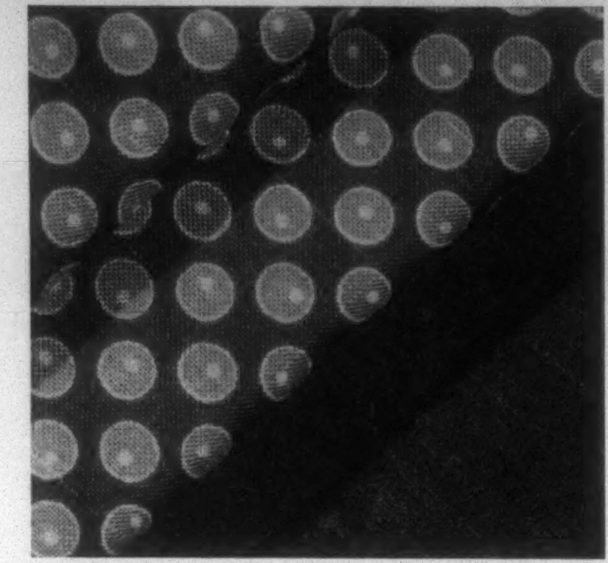
*Address before meeting of Textile Square Club, New York.



The Print Fabric is Spun Rayon Warp and Filling. The Plain Fabric is Spun Rayon Mixed With Wool.

as rayon yarn. Bright predominates. Dull was used going into this fall for wool mixtures but there are two opinions as to the value of dull staple. Bright is being used most extensively with wool.

Rayon staple differs from cotton and wool in the characteristics which give the spun yarn its strength. All three are dependent on the inherent strength of the individual fibers, but in addition the friction or drag between the twisted fibers spun together in yarn add to the yarn strength. The three differ in the nature of the drag.

Cotton has spirality. The individual fiber is hollow until maturity and then collapses in the form of a flat ribbon. The maturing fiber dries and the ribbon takes on a curl or corkscrew form. This spirality in the individual fiber is af considerable importance in the strength of cotton yarn, so much so that a cotton buyer in stapling a sample notices the amount of drag in pulling the staple and judges as to its strength value in yarn. A good classer can estimate fairly accurately the yarn strength possible in a given cotton sample, and without testing the inherent strength of the fibers.

Wool fiber is more nearly round than cotton and does not take a spiral shape, but it has a curl or crimp. The more flat a hair is the kinkier it is, and wools vary considerably in the degree of curl or kink. The surface of wool fiber is serrated in what look like scales. The serrations are neither regularly longitudinal nor latitudinal but are irregular in line in both directions. These serrations add to the drag between fibers twisted in yarn and so add to the yarn strength.

Rayon staple does not have spirality similar to cotton nor kink similar to wool, but it has some crimp which gives a drag in the spun yarn. Wet-cut staple has more crimp than dry-cut staple and spinners find it more like the natural fibers in that respect. Rayon that is dry-cut is held in tow or ribbon form until the cutting is accomplished and the staple therefore is straight when cut. Rayon staple that is wet-cut is washed and bleached after cutting and the short fibers are free to curl and crimp during finishing and drying.

The surface of rayon staple is deeply serrated longitudinally. This fact is contrary to the mental picture one forms in imagining rayon being spun through a round orifice. Instead of being round, smooth filaments like spun glass, rayon filaments assume a variety of forms even from different holes in the same spinneret. Cross sections of viscose filaments for instance resemble square cog-wheels and some of the serrations are so deep as to penetrate past the center of the mass. The surface of a rayon fiber is therefore seen to be anything but smooth, and these irregularities give drag and strength in the spun.

The crimp in rayon staple is not as tenacious as the spirality in cotton, and so rayon staple is spun to maximum yarn strength with a lower twist factor than cotton. The serrations are deeper than in wool fiber, and so worsted spinners find rayon staple blends giving greater yarn strength than in the all worsted yarn.

The whole subject is comparatively new and more will be learned about these effects as further experiments, research and commercial production are carried out.

These characteristics of rayon staple make it suitable not only spun alone but also blended with any of the natural fibers, cotton, wool, silk and linen. With cotton it is blended in various ratios for different purposes. It is found for instance that where colors and white are desired in the same cotton yarn rayon staple gives a much cleaner white than cotton and makes the stock-dyed cotton colors seem more brilliant. Rayon staple gives a softer yarn than cotton and the degree of softness is regulated in the ratio of the blend according to the type of fabric desired. Rayon staple is more absorptive than cotton and is used in towels. In fact, one nationally known dish towel has cotton, rayon staple and linen blended, and each fiber has characteristics that add to the quality of such a towel, strength, absorption, and freedom from lint.

Rayon staple and cotton can be blended in the raw stock, but the blending is usually done later in the process. In some cases the blend is made at the card and in most cases at the drawing frame. In making the blend at one of these later stages a better determination of the percentage ratio is possible and a more even running blend is assured. These is an advantage in running cotton and rayon staple separately through picker and card, since rayon staple has practically no waste, and any droppings in picker or card can be put back and run through again. Rayon staple and cotton spin beautifully together and have a natural affinity.

Spinning of wool fiber is done by one of two major processes, one known as wool and the other as worsted spinning. Wool spinning starts with a mix made on the floor where layer on layer of various grades or types of wool and other fiber are laid. In the processing and blending of the mixture an intertwining and felting of fibers is accomplished. In the worsted process the fibers are kept parallel as in cotton spinning, and the blends are usually made at the gill box, corresponding to the cotton drawing frames. Because of this fundamental difference in procedure the wool spinners have for years used rayon waste for blending. The irregularity of size and length of fiber in rayon waste is no drawback but rather aids the effect desired in wool spinning, while in worsted spinning an even, regular cut rayon staple makes the better yarn.

Blends of many kinds are made with rayon staple and worsted. Cotton is also added for three fiber blends in some hosiery and knitting yarns. Worsted and rayon staple ratios in a blend are determined by the effect and the price desired. Choice of specification of the rayon staple can make the yarn harsher or softer, and the percentage of each will determine the color in cross-dyeing.

In suiting fabrics it has been found that rayon staple makes a strong yarn and a fabric of excellent weaving qualities. The worsted manufacturers first trying blends with rayon staple expected it to lower the yarn strength, but to their surprise they found the resulting strength to be as high or even higher than the all worsted yarn. The blending of rayon staple has brought about the use of wool in cotton mills, so that now we find blends of wool and rayon staple in both worsted and cotton mills. The two overlap to some extent in the suiting trade and probably will to even greater extent as time goes on.

The majority of the spun rayon in this country is processed on the cotton system. The standard fabrics of greatest volume are the linen type of dress fabric made from all spun rayon slub yarn, the challis type, of which there are many constructions and price levels, the serges, and the summer suitings for both men and women. The dress goods are used in plain colors and prints, and they are found to take brilliant clear colors and clean-cut prints.

The finish of spun rayon materials is of utmost importance. Most of the successful dress goods are given a special finish, of which there are several, by the finishers. Much research has already been done on the finishing of spun rayon fabrics and the whole subject is still new and wide open. It is essential for a mill weaving and selling spun rayon fabric to experiment, and test, and follow through with the finished fabric in order to be sure, or even reasonably sure, of the eventual success of the fabric in the market and with the consumer. Without experimenting and careful testing a mill rushing into the use of spun rayon and using it in quantity production as a bootstrap in an effort to lift itself out of a hole will quite possibly ruin the market, not only for itself but for the rest of the industry as well. For this reason the manufacturer of the raw material does not encourage a mill to start into spun rayon if it is not to be done wholeheartedly and with all the care and consideration it deserves.

Development of fabrics of rayon staple in wool and worsted is progressing steadily in this country. The high price of wool last summer increased the interest in rayon staple but the fabrics made of both fibers together are proving to be sound and attractive, and indications are that they will hold their place on their own merits and continue to gain ground regardless of wool prices.

Much more has been done abroad with spun rayon in suitings and in other fabrics than in this country. It is the assurance given by the thorough establishment of spun rayon clothing of all kinds on a large volume scale in Germany, Italy, and England that lead us to have such confidence in the future developments in our market. The first real impetus in our market came from abroad. It is no reflection on the initiative and ingenuity of the men of the textile industry here, for we have had entirely different governmental and economic factors to contend with, but it is quite natural, on the other hand, that with a new fiber proving to be established on a large scale in Europe, the manufacturers in our industry should become interested. Several of those most interested went abroad, and they returned with a picture of what was going on in that new field which led them to launch lines of spun rayon fabrics on a sound and permanent basis here.

In Germany and Italy are two nationalistic governments interested in becoming economically independent of the rest of the world. Neither has a cotton crop, neither has a wool supply of any great size, and Italy's silk crop is not considerable. Rayon is something that both can make to supply textile needs, and the governments, through embargoes, quotas, tariffs, and subsidies, cut down the importation of outside textile to a minimum. The production of rayon and rayon staple increased tremendously to meet this demand created by an enforced vacuum, and experimenting with all kinds of clothing made of spun rayon resulted in the thorough establishment of excellent materials. Uniforms, suits, dresses, and shirts are made of spun rayon in both those countries today in volumes that are a revelation to the average textile man in this country.

In Japan we have a government with a nationalistic point of view but with a different aim. Instead of wanting to be independent of other countries, Japan wants the market of as many countries as possible. Their subsidy of the rayon staple industry is to encourage its use at home and at the same time to sell all possible outside. It is not that Italy does not want to export fiber; in fact, she sells a considerable quantity outside, but her first concern was economic independence. Germany exports very little fiber in comparison and consumes nearly the entire home production. Japan, with no cotton and no

(Continued on Page 31)

The Light Fabric has Continuous Filament Warp and Spun Rayon Slub Yarn Filling. The Print Fabric is All Spun Rayon.

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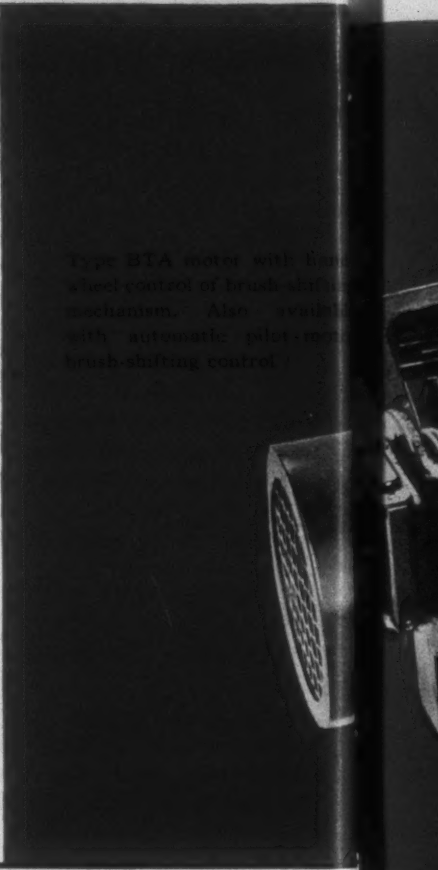

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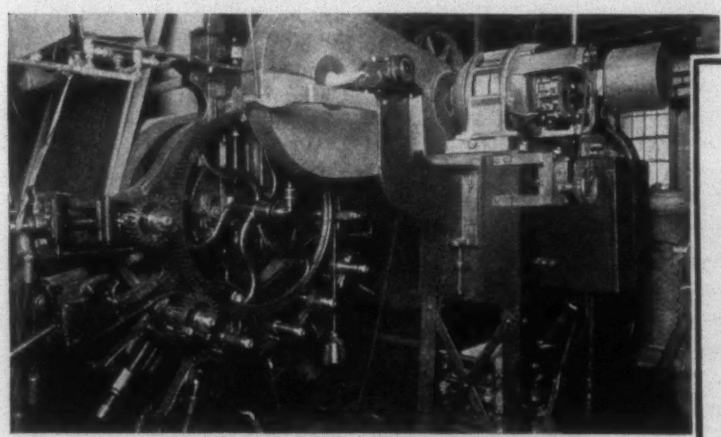

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Meeting Of Gaston County Division

Discussion On Cotton Features Program

A PARTICULARLY interesting discussion on cotton was the feature of the meeting of the Gaston County Division of the Southern Textile Association, held the evening of November 20th at the Community House of the A. M. Smyre Manufacturing Company at Gastonia.

A number of technical questions were discussed, but the greater part of the time was spent on the question of cotton. Paul Ceresole, an expert on Egyptian cotton, and W. A. Julian, cotton broker of Gastonia, led this part of the program.

Marshall Dilling led the technical discussion.

Two new members were added to the executive committee, these being A. P. Ritchie and S. M. Cauble.

The report of the discussion follows:

This Year's Cotton Crop

Chairman Dilling: Our customers are always talking about breaking strength, and we always talk about the spinning qualities of cotton. So we thought it would be interesting to talk about that matter here, and our first question is: *"How do you find the new crop of cotton in comparison with the crop of other years?"* You know, every year when the new crop of cotton comes on the market we are wondering about it, about how it compares with other years, about what its spinning qualities are, and whether we shall have to make any adjustments in our machinery in order to run it. This year has been like the year 1931 in many respects. They had wonderful weather in the Mississippi Delta in the year 1931 while the crop was being gathered. The cotton opened up and was gathered without any rain, without any unfavorable weather; and we thought that when we got it we were going to have the best cotton that had ever been marketed. But when we went to spin it we had a great deal of trouble. We were afraid at first to say anything about it, because we thought it must be our own fault. But along about the first of the next year we began talking about it, and we found that everybody else had the same trouble. We learned, then, that that cotton opened too rapidly; the hot, dry weather made it open too rapidly, and it did not ripen properly and so did not have good spinning qualities. This year the weather was very similar, and we feared that the quality of the cotton would be similar. But my experience has been that the cotton is clean, has a good color, and spins well. That is Delta cotton to which I refer there; I regret to say that I can not say as much for the Carolina cotton. The Carolina cotton of this year's crop looks to me to be not as good. It appears to me that there is more waste, that the cotton does not have the same fiber, and that it does not have the strength the Delta cotton has, and that therefore it is not of as good spinning quality as in former years.

New Crop of Good Quality

W. N. Williams, Supt., Rex Spinning Co., Gastonia: We found the new Delta crop of better quality than in any year recently. It runs better all the way through.

J. F. Lewis, Laboratory, Nuway Spinning Co., and Carlton Yarn Mills, Inc., Cherryville; Rudisill Spinning Mills, Inc., Lincolnton; and Rex Spinning Co., Ranlo, N. C.: Why, I have very little to say about the strength, except that I think where the old crop left off we have an increase running up to maybe 10 per cent. Some mills do not show any increase in breaking strength, but others show an improvement of as high as 10 per cent.

A. P. Richie, Supt., Dixon Mills, Inc., Gastonia: I have not run any Delta cotton; I run Carolina. I find it is as good as if not better than last year's crop. It runs very nicely and easily and cleans well.

Better Breaking Strength

H. G. Winget, Supt., Victory and Winget Mills, Textiles, Inc., Gastonia: I can give you some figures that have been taken from our laboratory reports over a period of eight months last year and eight months this year, and you can draw your own conclusion about the breaking strength. I have the figures here for June, July, August, September, October, November and December for the year 1935. For those months we had an average breaking strength of 103 1/7 on a given number of yarn—60s 2-ply, it was. This year we have had an average breaking strength of 103 over the same period of months.

J. Will Long, Supt., American Combed Yarn Corp., Gastonia: We have not noticed a difference in the breaking strength. I think there is a little more fly in the cotton this year than last, especially the Carolina cotton. We have more lint all through the mill than we did last year on the Carolina cotton. The Delta cotton I can not say is any better than in other years. In fact, our breaking strength has not shown any improvement. We are using Delta cotton now of the new crop.

S. M. Cauble, Supt., Lincoln Cotton Mill, and Laboratory Cotton Mills, Lincolnton, N. C.: I find the Carolina cotton this year so far is proving up mighty well. Our breaking strength seems to be about the same as it was before we went on the new cotton. So far as fly is concerned, there does seem to be a little more fly than for the last two years.

D. H. Whitener, Supt., Myrtle Mill, Textiles, Inc., Gastonia: The Delta cotton spins very well and runs very well, but as far as break is concerned we have not noticed any difference. It may be just a little better.

Humidity in Picker Room

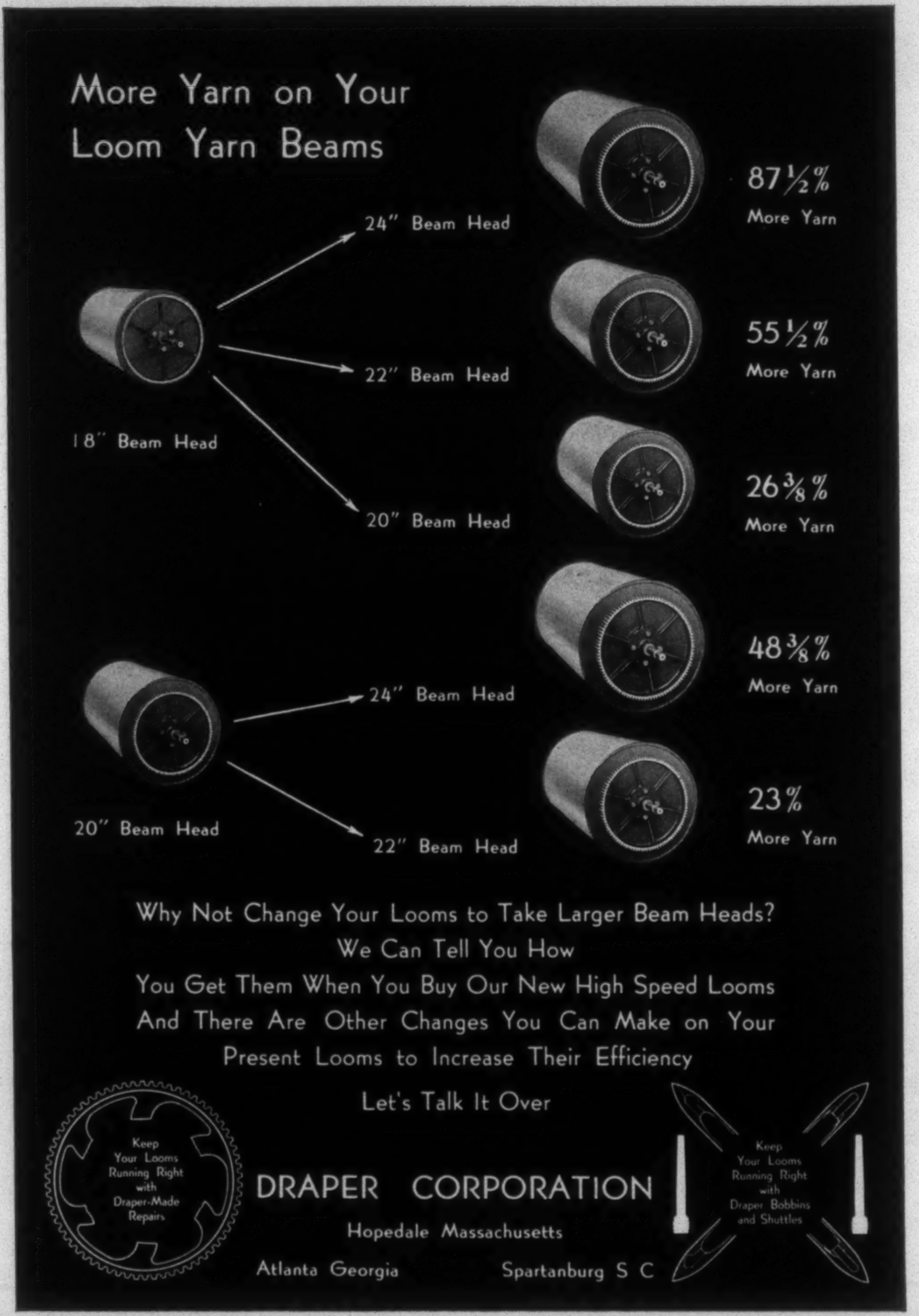
Chairman Dilling: We will go on now to the next question: *"Is humidity in the picker room beneficial?"*

Mr. Winget: You might ask the question, do we think the pickers would clean the cotton as well if it had a little bit of humidity in it? I do not think they would. If it were just a slight, little bit of humidity it might not affect the cleaning, but I think very much humidity would.

Chairman: That refers to pickers. What about cards? Do you think the cards would clean as well with high humidity as with low humidity?

Mr. Winget: No, I do not think so. I may be wrong, but that is my opinion.

Mr. Williams: I have thought about that a good deal, but I have not felt that it would be very beneficial unless



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And There Are Other Changes You Can Make on Your
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Let's Talk It Over

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a man had cotton that would not be very hard to clean. We have a system or machine that I guess cost more than the picker room did. I started it up and ran it but did not find any value in it, so I stopped it.

Chairman: Do you think your cotton cleans as well in damp weather as in dry weather on your pickers and your cards?

Mr. Williams: Well, I do, because I open it all in the picker room. I used not to think it did; I brought it in, then, in a trunk—in a conveyor. But I have changed that and bring it in in the bale, and I think it does clean better than before.

Question: Do you think there would be a varation in the lap from that humidity?

Damp Cotton Harder to Clean

Chairman: If you have it properly controlled you should eliminate that. My experience is that humidity in the picker room would do you harm in cleaning; that is, you would not get as good cleaning of the damp cotton as of dry cotton. I have always felt that the picker would knock out more impurities if the cotton is fairly dry than it would with a condition of high humidity.

Mr. Richie: It will not clean as well with high humidity.

Mr. Winget: I should like to ask a question. What percentage of cotton is water, to begin with when it is ripe?

Chairman: About 8 per cent, I guess, or 8.5.

Mr. Winget: I have always said, in talking, 6 to 8 per cent. It would seem that the amount of moisture it had when we started to put it through would have a lot to do with it.

Chairman: It has something to do with it, of course.

Mr. Winget: We work a lot of that out and then put some back in.

Chairman: Yes, that is the theory; we work it out and then put some back in. I have found the percentage of moisture as high as 15 per cent in a bale, and the cotton does not work well when the percentage is as high as that.

Variation in Laps

Let's go on to the next question. "*How much variation should be allowed in laps?*" How much variation do you allow in your laps?

Mr. Long: I allow a pound each way. If the weight of the lap is 38 pounds, I let the picker man vary one pound light or one pound heavy, or about 2.5 per cent.

Chairman: If a lap, yard by yard or inch by inch, were to vary 5 per cent, where would be the advantage in confining the variation to 2.5 per cent in the total weight of the lap?

Mr. Long: Of course, I think we have more variation, probably, than that, but that is a goal we set for the operator to go by.

Chairman: But with that 2.5 per cent variation in the total weight of the lap, you do not expect to maintain a variation of 2.5 per cent throughout the lap?

Mr. Long: No, sir.

Chairman: You have more. I think we have made a mistake many times in confining our variation in the weight of laps to too narrow a range. We have much more from yard to yard or from inch to inch.

Mr. Whitener: How far do you think we should go?

Chairman: That is a question. I think we should be perfectly safe in allowing about as much variation in the total weight of the lap as you would have from yard to yard. At the same time, you have to have a standard for your picker hands to go by.

Mr. Lewis: I found by weighing a 14-ounce lap yard by yard it will vary almost anywhere from 12 to 16 ounces. Take a whole lap, maybe 50 yards, and weigh each yard of the 50, and it will vary about 8 per cent.

Two Pounds Each Way

Mr. Whitener: We have been experimenting a little bit with that for the last four months, and we have been allowing a variation of two pounds each way, with no bad results.

Half Pound is Standard

Mr. Richie: We try to keep the variation in weight of our laps within a half-pound; that is our standard. If we have a lap that weighs a pound heavy, our picker man sets it over to one side, and marks it. When he finds one that is a pound light, he sets it over to one side and marks it. We put one of those laps on one card and one on another. Maybe we get six or seven a day. We put a heavy one on one card and a light one on another. In checking those weights on the card I have seen a light lap weigh all the way through heavier, sometimes, than a heavy one I put on the card.

Chairman: Would you rather run a lap a pound heavy or a pound light or put it back through the lapper? Do you think it would do more harm to run it or put it back through the lapper again? I believe it does more harm to put it back through.

Mr. Williams: I think it does more harm to put it back. But we have to have a standard. I do not think we should allow the picker man two pounds or three pounds or four pounds, for the reason that we have to have a system to go by. Otherwise, he might go to the limit each time.

Chairman: In our picker room we allow a pound variation each way. I agree with the other fellows that it does not make so much difference, but we use that as a system.

D .H. Cauble, Asst. Supt., Rhyne-Houser Mfg. Co., No. 2, Cherryville: We had been allowing a variation of a half-pound on either side. We changed our picker hand the other day, and we could tell the difference in the spinning room, even. It jumped from one number to two numbers. Suppose the lap weighed 41½ pounds; it ran around 41. I had him keep it on the heavy side of 41½, and it came back.

Local Conditions

Mr. Williams: I think we are all inclined to put too much stress on that. In some mills I have been in I could allow more variation than I could in others. That may seem strange, but nevertheless it is so. We do not have so much variation in our warps, and we are not so close down on that picker business. We allow a pound. Each man ought to work out his own system on that. Maybe one man can allow more than another man. His humidity may be different, or his facilities may be better than another man's. He may start with his lap right on the point, and the warp can come out heavy or light. I think everybody who makes warp should think about that; they know what they have to make and can find out how close they can come to the number of pounds each warp should weigh, and in that way they can find out what kind of system to run in the picker room.

Discussion On Cotton

At this time Mr. Dilling introduced W. A. Julian, cotton broker of Gastonia, who was asked to attend the meeting and take part in the discussion on raw cotton.

W. A. Julian, Cotton Broker, Gastonia: In dealing

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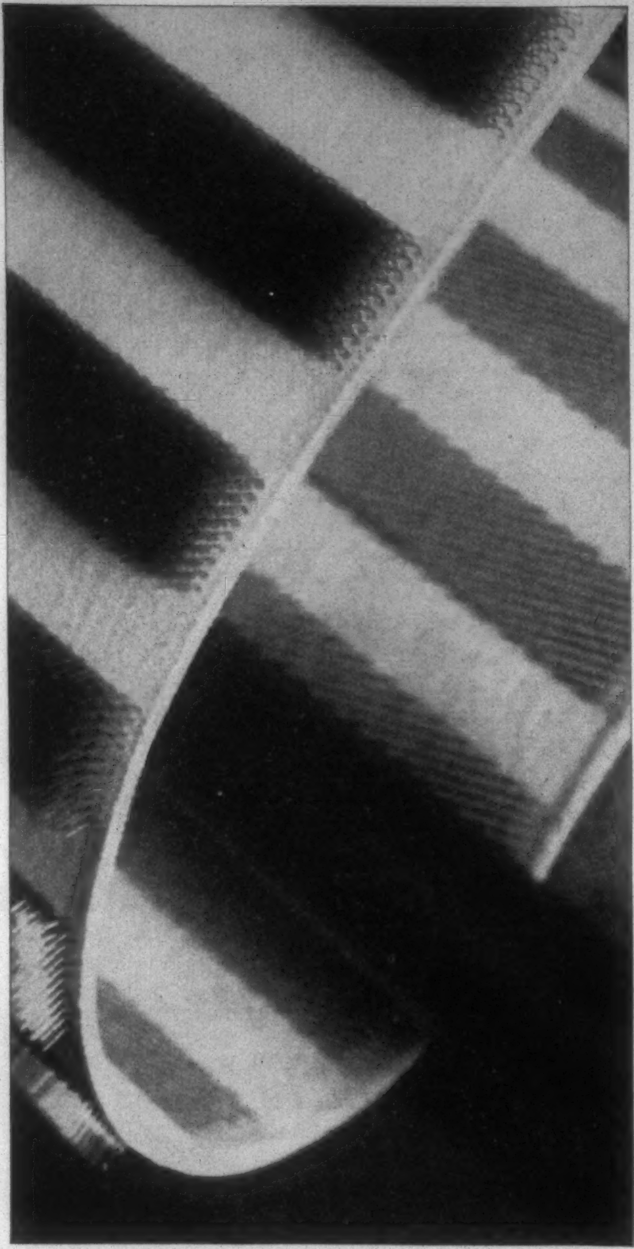

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with cotton, of course, we have to consider the classification of it and the buying of it and the hedging of it. It would be foolish, obviously, for me to try to tell you technical men anything about breaking strength, etc., because I know nothing about it. In my work I have to consider grade and staple, etc., and in that work we are governed entirely by the government standards.

I happen to have a man with me tonight who has had a very varied experience. He lived in Alexandria, Egypt, for a number of years, and he is now in Providence, R. I., representing the same company in the United States. I want to introduce to you now Mr. Ceresole, of Providence, who will talk to you about cotton.

Methods of Handling Egyptian Cotton

Mr. Ceresole: There are two essential things that distinguish the handling of Egyptian cotton in its country of origin from the way in which American cotton is handled. Here you always have a bale standing on its own bottom from the time the cotton is gathered in the field and ginned and all the way through the mill. A bale is one solid mass of the same kind of cotton exactly; and you know, when you class a bale, that you have always the same class, largely. In Egypt cotton has been grown industrially for about 50 or 60 years, but it was also grown to a quite large extent for about 50 years before that. So about 110 years covers the period during which cotton has been grown in Egypt. The soil there is very rich and fertile in which cotton grows beautifully. The average production of lint cotton per acre is about 700 pounds. That includes some specialty cottons on which the yield of lint cotton is not above 250 to 300 pounds per acre. In some sections, however, the yield goes as high as 900 pounds of lint cotton an acre.

When the Egyptians began growing cotton their conditions were awkward indeed. They could not control the ginning. The merchants could not be sure the cotton was honestly put up. So the dealers in Alexandria arrived at a system of tearing open every bale of cotton that came into Alexandria, which is the last market and the port through which all the cotton passes out of Egypt. They did that in order to assure themselves that there was nothing wrong with that bale.

Blending System

From that custom of opening every bale of cotton there developed the habit of not repacking the same bale but of blending the cotton from a number of bales. Suppose in Egypt today a merchant should get an order from a mill for a certain number of bales of cotton equal to the type the mill is then running. The merchant will get together a total of probably about twice the number of bales ordered. If the order is for one hundred bales, he will probably get together about twice as much as he needs to make up that number. That two hundred bales will consist of 20 lots, say, of 10 bales each. Many lots, however, will not be as large as that. (A "lot" is cotton coming from the same section of the country and ginned in the same manner.) The merchant will examine samples from the 20 different lots of cotton from which he is considering making up the shipment of 100 bales. In Egyptian cotton there are pretty nearly as many types of cotton as there are mills. That is not true in this country. The merchant narrows down his selection to the right amount of cotton to make up the hundred bales, and that cotton is carried down to a large room with floor built along the lines of a shower-bath floor, with small pieces of wood running all in the same direction with spaces of about an inch between them. One bale from each of the lots of cotton is placed alongside that

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To obtain the super finish we thought STEHEDCO Flat Steel Heddles should possess, it was necessary for our Research Engineers to design and build machines specially for this purpose. The resulting unparalleled high finish obtained on this equipment is, therefore, *exclusively* our own.

It is a polish that lasts — a super-smooth, mirror finish that enables the production of those faultless fabrics you have been striving for.

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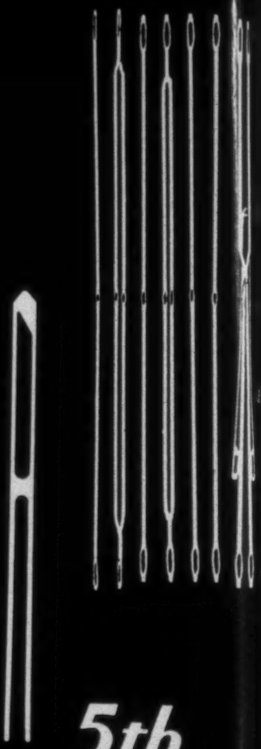

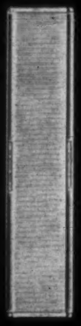

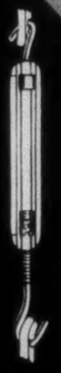

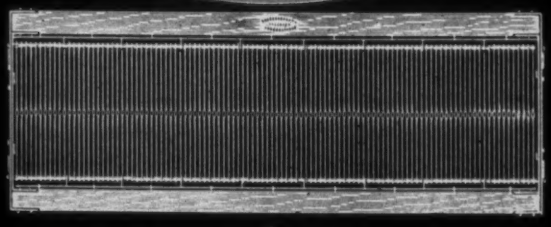

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Although possibly not the lowest in first cost, STEHEDCO Equipment will give you the greatest return on the money invested, which is the truest gauge of economy, as there is much more money involved in the RESULTS obtained than in its first cost.

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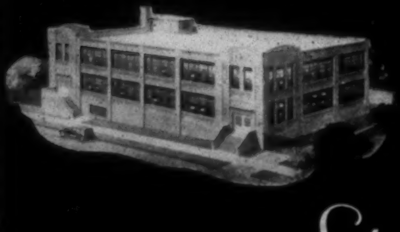

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The installation shown above is in the plant of a well known package dyer. Two gangs, fifty spindles to a side, are placed end to end, so that, when a large supply such as a cone or tube is used, one operative can tend 100 spindles.

Equipped with drum drive, the machines provide a uniform winding speed regardless of the diameter of the package. Therefore, the operative can start the spindles in rotation and doff in the same rotation, without leaving any spindle idle for any length of time.

The uniform speed also permits more uniform pressure and tension on the yarn, resulting in more uniform density from package to package and therefore more even dyeing.

The high, uniform speed at which this machine runs permits the operative to earn more money, because of a large increase in production, and at the same time effects a material reduction in labor cost.

Further details on request.

FOSTER MODEL 102

FOSTER MACHINE COMPANY
Westfield, Mass.

For Winding Dyeing Packages

that floor and opened. So 10 bales, perhaps, each coming from a different lot of cotton, are all being opened at once. Native workers tear open those bales and begin throwing the cotton in the middle of the floor. When the floor is pretty well covered, other natives are sent in who shufflle the loose cotton all together with their hands and feet. When it is pretty well blended together it is put in sacks of 200 pounds each, and when the floor is emptied the process is begun again. That is continued until all the cotton out of those bales has been blended together; then another bale from each of the lots is brought in and the process continued until all the cotton for that 100-bale shipment has been blended in that way. So, when you get the Egyptian cotton, it is already blended.

EUROPE PREFERS EGYPTIAN

It is certainly a fact that, in the mills on the Continent of Europe much prefer to run the Egyptian, rather than American cotton, because they are getting an even blend all along. That is undoubtedly one of the chief reasons why Egyptian cotton has taken as strong a position as it has in competition with the Delta staples. Many years ago there were many mills both in America and on the continent of Europe which wanted to run American cotton; the owners of the mills had always run it, and they were conservative and were opposed to change. As Egyptian cotton became cheaper, and they began to use it. Now they do not want to go back to American. There is a high tariff on Egyptian cotton—7 cents a pound. Many European mills began to think that there must be something to the Egyptian cotton, or otherwise the American growers would not be so frightened of it. That certainly served to introduce Egyptian cotton to many mills that, because of conservatism, would not have used it otherwise.

MANY VARIETIES

Many varieties of cotton come out of Egypt. It is very hard to explain to a fine spinner who uses Egyptian cotton the advantages and the disadvantages of the different varieties. You will not find a great deal of difference between the Delta staples and the Carolina staples in this country. Anybody using one can certainly get along with the other. With Egyptian cotton that is not always true, and we have had a lot of trouble in the last few years in introducing Egyptian cotton to the fine yarn spinners who require it for the numbers they manufacture. That point of the different varieties coming out of Egypt is one, I think, very different from the cotton we know in the domestic varieties.

CLEAN APPEARANCE OF BALES

There is another point, I think, which I could perhaps touch on; and that is the very clean appearance of the package in which the Egyptian cotton is put up. The bale is put up in one sheet of burlap. It has eleven bands around it. The bale is very much cleaner in appearance than the American bale. It is more highly compressed; it is a smaller bale but weighs 750 pounds. That clean appearance and that good wrapper, which insures the bale's arriving in good condition unless it is actually dropped into water, have done much to popularize Egyptian cotton. A frequent complaint heard from European mills is, "Why in the devil can't these American shippers

(*Continued on Page 20*)

SAPAMINE KW is now established as the most effective softening agent for fabrics. No oils or grease, no odor.

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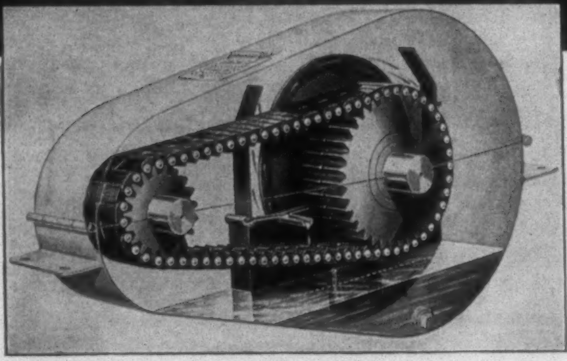

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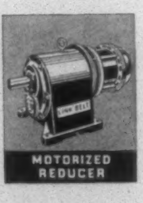

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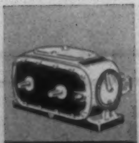
HERRINGBONE GEAR REDUCER



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Personal News

Stuart W. Cramer, Jr., treasurer of Cramerton (N. C.) Mills, and Mrs. Cramer sailed from New York on the Queen Mary last week for a visit to Europe.

C. C. White, who has been office manager for the Startex Mills, Tucapau, S. C., has been elected treasurer of the company.

R. E. Lee, formerly a civil engineer of Tennessee, has been promoted from second hand to overseer weaving, Arnall Mills, Sargent, Ga.

W. L. Caston has resigned as overseer weaving, Arnall Mills, Sargent, Ga., to accept a similar one with Carolina Cotton & Woolen Mills of Spray, N. C.

E. V. Wilson, formerly assistant to the superintendent, Pelzer Manufacturing Company, Pelzer, S. C., has accepted a position with the Greensboro Loom Reed Company of Greensboro, N. C., in charge of the office.

Geo. H. Lanier, Jr., son of George H. Lanier, head of the West Point (Ga.) group of mills, was married last week to Miss Rosalind Vereen, daughter of W. J. Vereen, president of the Moultrie (Ga.) Cotton Mills.

H. L. Pruitt, formerly of Pelzer, S. C., has become department superintendent of weaving at the Riverside & Dan River Mills, Danville, Va. Prior to going to Pelzer, Mr. Pruitt was superintendent of the Adams-Swirles Mills of Macon, Ga.

Jack B. Boyter, who resigned as overseer of spinning at the Rhodhiss Mills, Rhodhiss, N. C., has accepted a position as superintendent of the yarn department of the Fitzgerald Cotton Mills, Fitzgerald, Ga. He is assisted by Joe F. Creek on first shift and Brant Sheffield on second shift.

S. A. Roane, who has served with the Barnes Textile Associates of Boston for the past eight years, has been appointed Southern representative for J. S. Fallow & Co., of New Bedford, Mass., who act as sales agents for a number of textile equipment manufacturers. Mr. Roane has opened offices at 209 Franklin Life Bldg., Greenville, S. C.

CLINTON STARCHES
FOR ALL TEXTILE PURPOSES
Manufactured by
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QUALITY SERVICE

Dickson With James Talcot, Inc.

Laurie C. Dickson, closely identified for years with the textile trade and formerly vice-president and treasurer of the Stevens Yarn Company, Inc., of New York, and Charlotte, has recently become associated with the well known factoring firm of James Talcot, Inc., of 225 Fourth Ave., New York.

For over 80 years, since its establishment in 1854, James Talcot, Inc., has been one of the leading factoring firms of America. While devoting close attention to the textile industry, its activities have reached also into many other industries and commercial fields.

Mr. Dickson will represent the company's interests in the South, from his offices at 147 Brevard Court, Charlotte, but his duties also will require considerable of his time in New York.

Honorary Textile Frat Has Initiation

Clemson, S. C.—Iota Chapter, Phi Psi, national honorary fraternity, has completed initiation of two seniors and four juniors as new members of the chapter. These are J. C. Brooks of Gray Court and T. F. McNamara of Taylors, selected from the senior class; and E. H. Fuller of Columbia, J. C. Shell of Laurens, A. W. Taylor of Charleston and H. L. Giesberg of Anderson, selected from the junior class. The final initiation meeting included an oyster supper, which was attended also by faculty honorary members, Dean H. H. Willis and Professors R. K. Naton, J. Lindsay, W. G. Day and H. L. Huckabee.

Predicts Banner Year For Textiles

Howard E. Coffin, chairman of the Board of Southeastern Cottons, Inc., forecast a banner year for the textile industry as directors assembled for the three-day semi-annual meeting at Sea Island, Ga.

The greatest production and consumption of cotton Coffin said in a statement. "Consumer buying power is being substantially increased, and the nation-wide demand for goods both by industries and for home use inevitably will increase."

He said Southeastern Cottons, which sells for 40 Southern mills, expects to do a $60,000,000 business.

"But of even greater significance is the closely knit co-operation within the industry which we have achieved, and which is directly in line with the progressive efforts of President Roosevelt and the national administration," he asserted.

The greatest production and consumptiton of cotton mill goods in the history of the industry is in prospect for this year, according to Donald Comer, Birmingham, president of the American Cotton Manufacturers' Association, who attended the meeting.

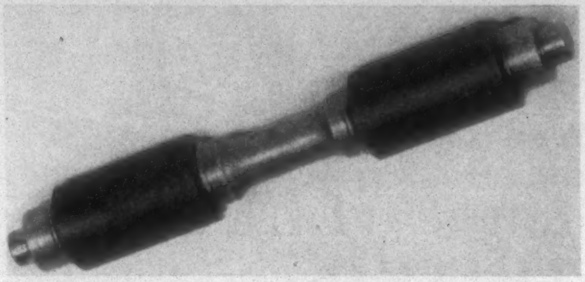
Among those attending were: Mr. and Mrs. Donald Comer and Mr. and Mrs. Bragg Comer, Birmingham; Mr. and Mrs. Bragg Comer III, Miss Dora Comer, Alexander City, Ala.; Mr. and Mrs. Hugh Comer, Sylacauga, Ala.; Mr. and Mrs. J. Craig Smith, Sylacauga; Mr. and Mrs. J. C. Evins, Mr. and Mrs. Stanley Converse, Clifton, S. C.; Mr. and Mrs. I. F. Craven, Ramseur, N. C.;

Mr. and Mrs. S. J. DuPre, Glendale, S. C.; Mr. and Mrs. Comer Jennings, Eufaula, Ala.; Mr. and Mrs. H. F. Jones, Calhoun, Ga.; Mr. and Mrs. J. C. Self, Jim Self, Jr., and Mr. and Mrs. J. B. Harris, Greenwood, S. C.; Mr. and Mrs. W. B. Cole, Robert L. Cole and Miss Elizabeth Cole, Rockingham, N. C.; James A. Chapman, Sr., and Mr. and Mrs. James A. Chapman, Jr., Spartanburg; Mr. and Mrs. M. M. Bryan, Jefferson, Ga.; Mr. and Mrs. William R. Jackson, Greensboro, Ga.; Mr. and Mrs. Robert Lassiter and John F. Matheson, Mooresville, N. C.; Mr. and Mrs. M. A. Bearden, Greensboro, N. C.; Mr. and Mrs. C. S. Henery, Orangeburg, S. C.; Mr. and Mrs. J. Holmes Davis, Sr., and Mr. and Mrs. J. Holmes Davis, Jr., Wilmington, N. C.; Mr. and Mrs. Elliott W. Springs, Lancaster, S. C.; Mr. and Mrs. John W. Porter, Rockingham; Mr. and Mrs. I. B. Covington, Wadesboro, N. C.; Henry McD. Tichenor, Mrs. E. S. Tichenor, Monroe, Ga.; Mr. and Mrs. W. B. Smith, Tennille; Mr. and Mrs. George W. Mountcastle, Lexington, N. C.; Mr. and Mrs. Julian Price, Greensboro, N. C.; Mr. and Mrs. J. W. Evans, Memphis; Mr. and Mrs. F. F. H. Fleitmann, New York City; D. C. Newman, Charlotte; Mr. and Mrs. W. D. Anderson, Macon; Senator and Mrs. Walter F. George, Vienna; Mrs. Susie G. Reeves, Summit, N. J.; Mr. and Mrs. W. D. Clark, Lexington, N. C.; Mr. and Mrs. J. O. Robinson, Atlanta, and others.

Koroseal Textile Roll Covering

Much interest is being shown in the new "Koroseal" textile roll covering recently introduced by the B. F. Goodrich Company of Akron, Ohio. In a previous notice regarding this new product, it was erroneously stated that the roll cvering was of synthetic rubber. The Goodrich Company describes it as a "synthetic elastic material." It is not rubber and contains no rubber.

Koroseal is a coined word and refers to a variety of compounds ranging in hardness from an extremely soft and elastic to that of bone-hard material. Being thermoplastic, it lends itself to processing on standard rubber machinery, hence it may be molded, extruded or calendered. Koroseal can be processed to yield tensile strength up to 7,500 pounds per square inch.



Elasticity of Koroseal may be varied over a wide range and measured in terms of its elongation. For textile roll coverings, Koroseal having a tensile strength of 2,200 pounds per square inch at 70 degrees F. has been selected.

The new roll covering is being used on roving and spinning frames. The company reports that on tests made on cots on a spinning frame, beginning in January, 1935, the rolls have run 120 hours per week and show excellent results from standpoint of wear, strength of yarn, resistance to grooving, and ease of installation on arbors. The report showed little or no lick-up of fibres and that there was no chemical deterioration of the material on standing.

The above picture was taken at the Oyster Roast tendered employees and special guests by the Spofford Mills, Wilmington, N. C. About 430 persons were present. Among the honor guests were W. B. Cole, John Cole, and John Porter of Rockingham.

The dinner was under direction of J. H. Riggin, overseer of carding and spinning, Mrs. Riggin and Miss Edith Little, and was held at Mr. Riggin's place on Masonboro Sound. The menu consisted of clam chowder, roasted oysters, pickles, oysterettes and coffee.

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Fickle Dame Fashion, in her never-ending search for something different, is continually creating new problems for textile processing executives.

These problems are further complicated by a constant stream of new processing materials—products of chemical research. WHICH of these materials to use for a specific purpose is frequently a question that requires COLLECTIVE THINKING — the knowledge and experience of more than one person.

Collective thinking is available without cost, even to the smallest processing plant or department, through A-H CONSULTATION SERVICE. This service is rendered by a staff of specially trained chemists, assisted by a completely equipped, modern laboratory and a company experience of 121 years.

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PROVIDENCE, R. I.

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Meeting of Gaston County Division

(*Continued from Page 16*)

put up their cotton a little more neatly?" In the past, you see, American cotton was supreme. Today many more million bales are grown in different countries than were grown even a few years ago, and the mills have the opportunity of using other kinds of cotton. Their reasons for using other than American cotton vary. Sometimes they can get Brazilian exchange when they can not get dollar exchange. But at other times it may be the difference in appearance or the difference in waste or the difference in tare allowance, etc.

Mr. Julian: One reason for the neat appearance of the package in Egyptian cotton is the fact that when you get a shipment of Egyptian cotton you have to sample only one bale. If you reject the one bale you sample, you reject the whole shipment of a hundred bales or whatever it may be. But with American cotton you have to sample each bale on each side of the bale.

Mr. Ceresole: Yes. There have been efforts, however, to standardize the American bale, and one of those efforts has been the round bale. Some mills in New England will not use anything else. They have in that bale a little pocket in the wrapping in which they put the sample, and you are not allowed to cut the bale. It is mostly short cotton, and it does not make so much difference. If a mill is using 15/16-inch cotton and gets 1 1/32-inch or 1 1/16-inch it does not know the difference. I think that classing cotton down to 1/32 of an inch is bunk, anyway. That is my opinion. I think there should be a little more give tand take, a little more leeway.

Cotton Under the Microscope

We have had amusing experiences in some of the New England mills. Perhaps you have heard of the polarized light test. One mill which buys cotton from us makes a high-break cloth for book binding, and that mill put in the apparatus for making the polarized light test. In making that test, the immature fibers in the cotton show up a different color under the microscope, and you count the immature fibers and the mature fibers up to 50, and get the percentage of each.

One mill man said to me aabout some cotton: "That cotton looks bad to me; I believe the fibers are immature. Let's look at it under the microscope." I said: "Well, all right, let's look at it; but I am not going to let you reject it if it has 20 per cent of immature fibers." So we looked at it and found it had 2 per cent. I suggested that we look at the cotton he had been running, and when we did so we found it had 14 per cent immature.

Handling the American Crop

Chairman: I want to ask Mr. Ceresole and Mr. Julian if they do not think the usual method of handling American cotton is not the world's greatest commercial disgrace. I mean the irregularity of ginning, the improper packaging, and the improper cutting.

Mr. Julian: I think I can say that the handling of American cotton has progressed, in the last 15 years, 100 per cent. One factor, I think, is the fact that there is in South Carolina a man who has been raising pedigreed seed—Mr. Coker.

I think Mr. Ceresole can tell you about a conversation he had with Mr. Coker about the effect of weather conditions on cotton. I believe the cutting of cotton in ginning is due to the fact that the cotton is ginned wet. The average farmer has not been taught to dry his cotton. I was down in Alabama recently, at a place where they have a process for drying the cotton before it is ginned. Then it gins more smoothly. The Government has put out pamphlets in recent years giving methods of preparation of the cotton as to types.

As for cutting the bale, every time you sell it the buyer demands new samples. I do not see how you can get around that.

You know, weather conditions have a lot to do with cotton. On a wet day the staple looks longer, and on a dry day it looks shorter.

Mr. Ceresole: Talking about the physical handling of the actual bale, I do think it is a disgrace, since we know that other varieties are handled better. But I think there is one thing which accounts for the slipshod way in which it is handled, and that is the extremely low cost. There is nothing else in the world that is handled for so small a margin from the time it leaves the field until it reaches the mill.

Weather damage to cotton is caused mostly by the small farmer. The larger plantation owners, when they gin their cotton, immediately warehouse it. You know lots of our damaged cotton is damaged because it is allowed to lie out on the ground. So I think the appearance of the bale goes back to the man who raises the cotton.

Chairman: I should like to ask Mr. Ceresole if there are many countries outside of Egypt that are growing staple cottons that compete with American cotton.

Mr. Ceresole: No, not to a great extent. There are some very good staple cottons raised in Central Africa, in Uganda and Kenya—about 1 1/32-inch. Most of that cotton goes to Japan; a little goes to European mills, but not much. It is the old story of a small supply and an unstable one. There is also some raised in Puerto Rico, in Barbados, etc., but that is a very small amount. It goes to a few specialty mills in England and on the Continent which want it enough to pay the price. There is one other country, and that is the Anglo-Egyptian Sudan, which raises a very good quality of long staple cotton. Russia has made attempts to grow Egyptian cotton somewhere—along the border of Persia, I think. I know some very large shipments of Egyptian seed have gone to Russia. We know very little, of course, about what goes on in Russia. If such an experiment succeeds, they say something about it; of not, they do not.

Mr. Winget: Is there any difference in the ginning of American and Egyptian cotton?

EGYPTIANS USE ROLLER GINS

Mr. Ceresole: Yes, there is. The whole of the Egyptian is ginned on roller gins. Roller ginning is much more expensive; it takes much more time. It is a process which is supposed to preserve the staple of the cotton better. It is very hard to say whether it does in the shorter lengths. When you get to the Sak, or Pima, you have to gin it on roller gins. They use the roller gins in Arizona. Those of you who have spun Pima cotton know it is very hard to keep up the breaking strength. That is due to the fact that the individual Pima fiber is uneven; it has thick spots and thin spots. Also, the end of the fiber is blunt, whereas the Egyptitan fiber is pointed. So the Sak was crossed with the Pima, and from that there has been achieved this year a production of about five thousand bales. The product is not quite up to Egyptian, but it is much better than Pima. In many cases today mills selling to the Government have to guarantee that their goods are made out of all-American cotton, and so they are very glad to get this cotton.

Question: Is the ginning responsible for the tremen-

(*Continued on Page 32*)

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Total creeling time is minimum because:

1. Each cone holds enough yarn for 3 or more full beams.

2. The extra cone holder for each warping end allows magazining two cones of the same yarn count for long runs, or can be used to load another count of yarn while the warper is running.

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3. The fixed position of the beam insures better selvedges.

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Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

Wage Increases

As has always been the case, when cotton mills have enjoyed larger earnings, there has been a division of the profits by increasing the wages paid the employees.

Wage increases always follow the advent of prosperity much closer than wage reductions follow the appearance of periods of poor business; in fact, cotton mills in the South have over a period of years, lost heavily through efforts to maintain wages after profits had disappeared and red ink was being used on the ledger page.

We are not publishing the long list of wage increases because we believe that such publication would give too much credit to some who have advanced their scale from a basis which was too low and too little credit to those who have maintained wages throughout the dull period and therefore have little reason to make substantial advances at this time.

While not publishing any accounts of wage increases and hoping that credit will be given to those who deserve credit, we wish to commend the advances which have been made.

The cotton mill employees have, as a rule, realized the difficulties of the cotton mills during the years of small profits or in many cases actual losses and have been loyal while receiving compensation which in many cases was less than that needed for reasonable living expenses.

We know of no group of people who are as consistently loyal to their employers as the cotton mill operatives of the South and we rejoice in their present improved situation which comes as the result of wage advances.

Farmers Urge Jute Tariff

A group of farmers, meeting in Barbour County, Alabama, last week, passed a resolution to urge Congress to place a tariff on jute. The action came after they had heard an address by Donald Comer, president of the American Cotton Manufacturers' Association, in which he pointed out that the American cotton interests were the only ones in the world not protected from the free importation of jute. He showed that it takes 12 pounds of jute to cover a bale of cotton, whereas only 5 pounds of cotton bagging is required. Mr. Comer also spoke in favor of selling cotton on a net weight basis.

It is hoped that the movement by the farmers in Alabama can be spread to other cotton growers throughout the South.

We have for years pointed out that efforts of the cotton manufacturers to get a tariff placed on jute have been beaten by the jute lobby in Washington. We are glad to see the farmers take a hand in the fight. They have a big stake in the issue.

Less Foreign Cotton

Although official estimates have not been received, private estimates indicate a reduction of 200,000 bales in the recent report of the cotton crop of Brazil. There are also reports from reputable sources that the recently indicated crops of China and India will be reduced 400,000 and 250,000 bales, respectively.

These reports show an aggregate reduction of 850,000 bales from the foreign cotton production as indicated a few weeks ago.

One writer states that there is a reasonable basis for expecting that more than 7,500,000 bales will be consumed by American mills as against approximately 6,300,000 last year.

The most vital factor, however, as we have repeatedly stated, is consumption of cotton outside the United States.

The man who can accurately forecast foreign consumption will be in position to forecast the future movement of the price of cotton.

If the foreign consumption of cotton maintains last year's rate or goes higher, there will undoubtedly be an advance in the price of the staple.

We are not at this time making any predic-

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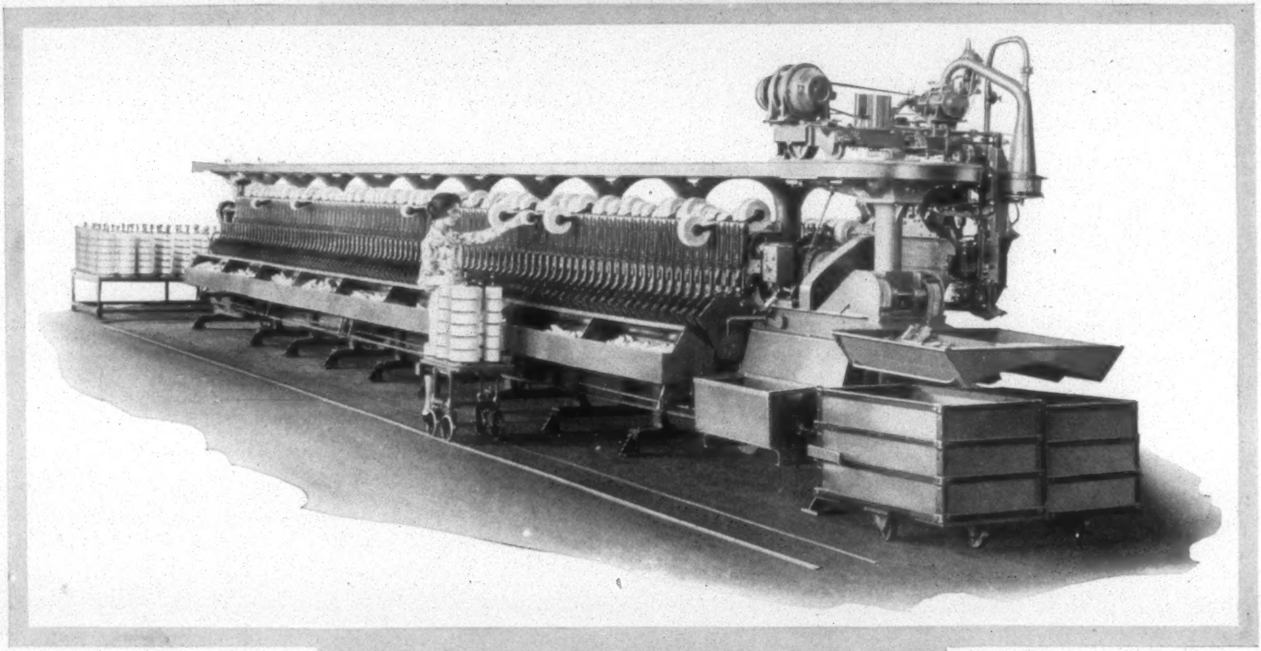

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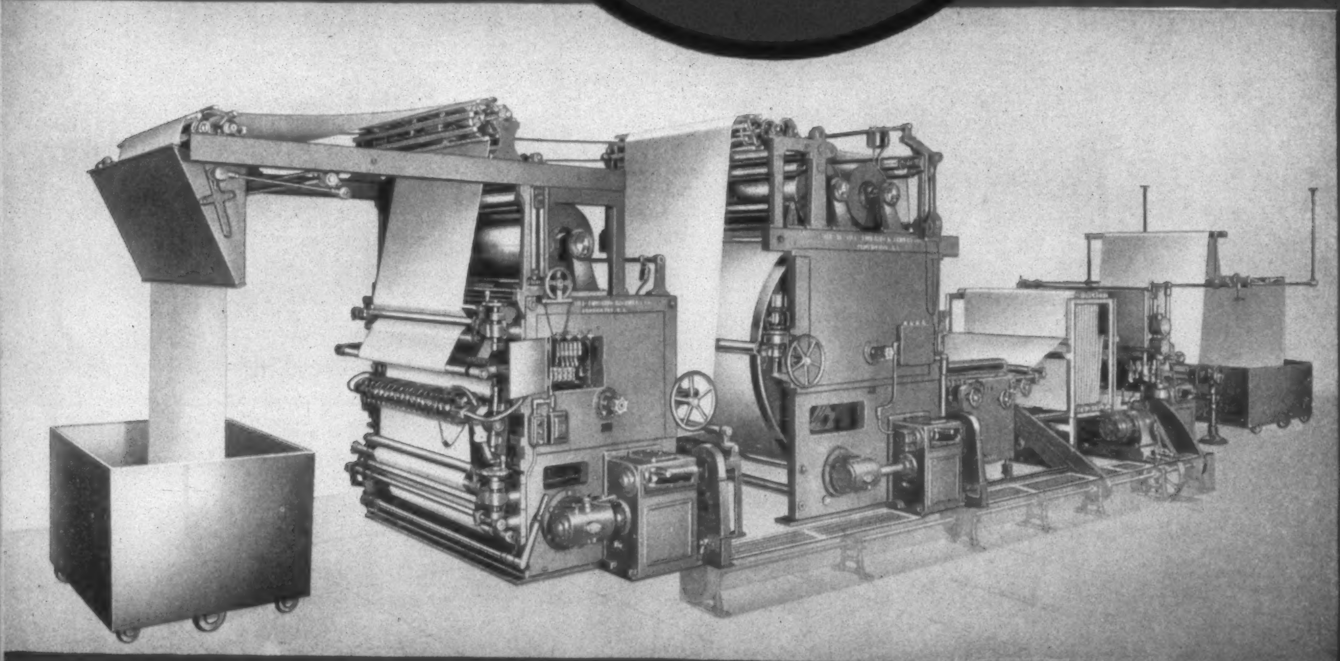

The Super Sanforizing Range with Super Reverse Finishing Unit illustrated above as installed in the Thomaston Bleachery is representative of the most desirable size and type of Range where large production and the highest quality of work are required for goods ranging in weight from 2 yds. per pound to 8 yds. per pound. This Range is designed to produce a Sanforized finish on both sides or on one side only, as preferred.

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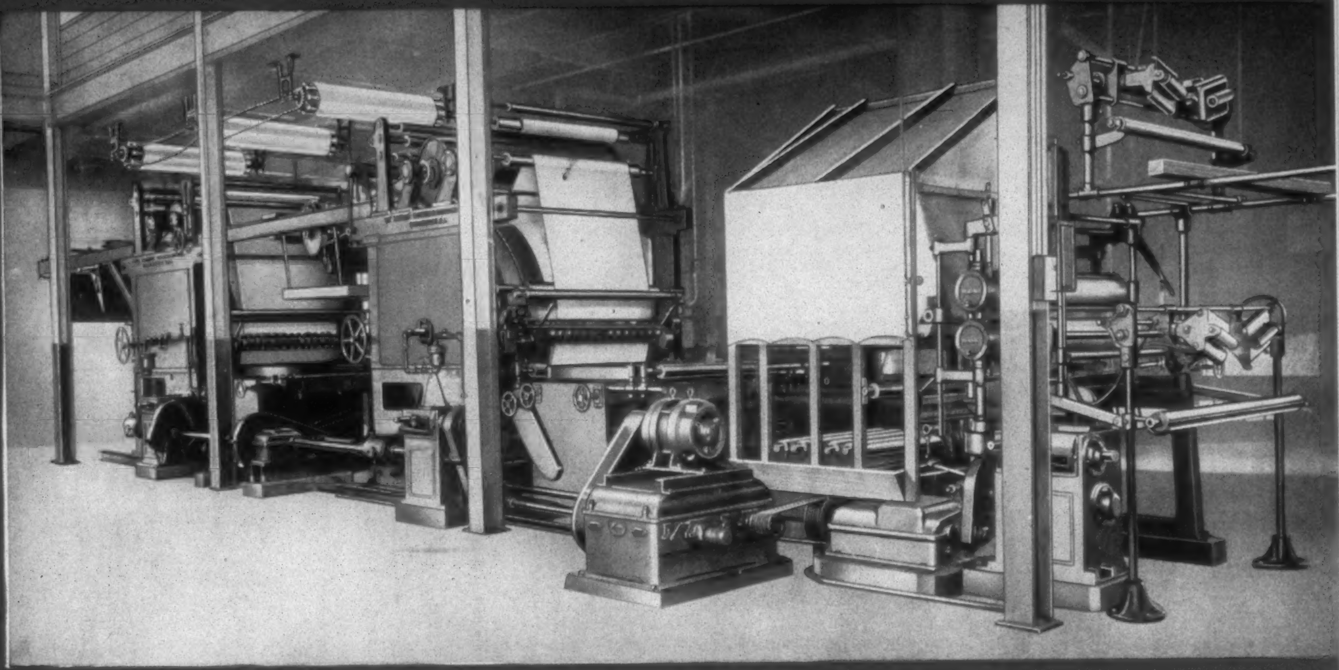

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tions to foreign consumption, although it has so far been well maintained, but are making a careful survey of such information as becomes available.

Wise cotton manufacturers will forget the slight change which may be made in the estimates of the American cotton crop and concentrate their attention upon the consumption of cotton outside the United States.

Ericson's Associate

Our best information is to the effect that when Professor Ericson of the University of North Carolina attended the dinner, in a negro hotel at Durham, N. C., in honor of the negro Communist Jas. W. Ford, the only other white man present was Paul Crouch of Charlotte, N. C.

It will probably interest our readers to know something about Professor Ericson's associate, the other white man who delighted to eat with negroes in a negro hotel.

About 1923, two American soldiers, Paul Crouch and Walter Trumbull, in the United States Army Post at Schofield Barracks, Hawaii, were tried and convicted of treasonable actions and for organizing a Communist nuclei in their detachment.

They were sentenced to 35 to 40 years in Alcatraz Prison, California, but were released in approximately three years due to agitation in their behalf by Communist and Communist sympathizers in the United States.

George Pershing, a Communist organizer who was very active during the early portion of the Gastonia strike of 1929, wrote in "The Young Worker" of January, 1929:

> "It was my privilege to be with Paul Crouch and Walter Trumbull during their whole period of confinement. Almost every day we stole a few moments to spend in a discussion of some socialistic topic. Here the seeds of discontent blossomed and with the unending patience of the two soldier communists, I began to understand the teachings of Marx and Engels, with the result that my entire life was molded for future radical work."

Paul Crouch has been acquiring his living since 1929 by being district organizer for the Communists with headquarters in Charlotte and at one time the records of his office showed that he had, nominally, more than 3,300 Communist members in Mecklenburg County, the county in which Charlotte is located. An investigation revealed that most of them were people who had been persuaded to join and pay an iniation fee of 10 cents but had no real interest in Communism.

A detective, who gained access to the records of Paul Crouch's office, told us that they disclosed that over a period of a few months, Crouch had received financial support from professors and students in every large college in North Carolina with the exception of Davidson College.

Paul Crouch, ex-convict and convicted traitor to his country, has lived in Charlotte for at least seven years upon funds contributed, very largely, by professors and students in North Carolina colleges.

When this Paul Crouch entered a negro hotel in Durham to do honor to a negro Communist, Jac. W. Ford, he had as his companion and, as far as we know the only other white person in attendance, Professor Ericson of the University of North Carolina.

There is an old saying that "birds of a feather flock together."

Another Pay-Off

Dr. W. W. Alexander of Atlanta, Ga., has succeeded Rexford Tugwell as head of the Resettlement Administration and to us it appears as another radical being paid for his activities.

For a number of years Dr. Alexander acquired his living as secretary and promoter of the Interracial League, an organization which was presumed to foster better relations between the races, but appeared to lean very strongly towards social equality between blacks and whites.

In his capacity as secretary of the Inter-racial League, Dr. Alexander affiliated and co-operated with many prominent radicals and was regarded by many, as one of them.

In his new position Dr. Alexander will draw a lucrative salary but he lacks the ability of Rexford Tugwell and we doubt that he retains the position for any great length of time.

A Manchester Strike Threatened

A Manchester cotton mill strike by Christmas threatened Lancashire textile mills, which have about 52,000,000 spindles.

The first steps for a possible walkout already has been taken, textile union officials have decided to pole the membership for authority to call the strike.

English mill owners declared the 1932 strike cost them an estimated $60,000,000 and they are making effort to keep their workers from striking, but the cotton manufacturing industry of England is dominated by unions and union officials control the situation.

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Mill News Items

COLUMBUS, GA.—The Bradley Manufacturing Company has installed 50 Model C 4 Crompton & Knowles looms for the manufacture of upholstery.

CHATTANOOGA, TENN.—Davenport Hosiery Mills has completed an addition to its silk mill in Chattanooga which doubles its capacity, according to Kenneth Durham, vice-president.

FRONT ROYAL, VA.—The Viscose Company's new viscose process filament rayon yarn producing plant, which that company has declared itself as planning to build, will be located here.

The company has exercised an option on 300 acres of land here, and work of examining the title and preparing deeds is under way.

RICHMOND, VA.—The rayon division of E. I. Du Pont de Nemours & Co., Inc., made known plans for construction of an addition to its viscose process rayon yarn plant at Ampthill, near here, which will result in an increased rayon capacity of from 7 million to 9 million pounds of yarn annually, and will require an operating force of approximately 500 men and women.

Willis Shackelford, plant manager, said that constructiton will start immediately, and that it is expected that the addition will be completed by January 1, 1938. Construction will give employment to a force of 800 men.

Under construction at Ampthill, at the present time, is an expansion of the cellulose film plant, begun in September by the Cellophane division of the company.

GREENSBORO, N. C.—W. J. Carter and associates announce that contract has been let for construction here of a modern mill to manufacture rayon and silk dress goods, mill building and machinery, to represent an investment of $750,000. The plant will begin with 400 looms. The construction contract has been let to Charles W. Angle, Inc., Greensboro. The plant is to be ready for operation within four to five months.

It is understood here that Mr. Carter will have a controlling interest in the new enterprise, which has not yet been given a trade name, but which will shortly be incorporated in North Carolina. Associated with him will be several New York factors, among whom is H. Nelson Slater, president of S. Slater & Sons, Inc.

Mr. Carter has for some time been executive vice-president of S. Slater & Sons, at Webster, Mass., and Slater, S. C., and he will continue in that capacity, but is also to take the active management of the Greensboro mill. This latter is an entirely separate corporate entity. He is a former vice-president of Burlington Mills.

Products of the Greensboro mill will be merchandised by J. P. Stevens & Co., which firm also sells the products of the Slater Mills.

The Greensboro mill is to be located just outside the city limits on South Elm street extension on a 10-acre site. The mill building, designed by Charles C. Hartmann, Greensboro, will front 234 feet on South Elm street

Mill News Items

and will run back 419 feet, providing over 90,000 square feet of manufacturing space on one floor. It is to be covered with a flat type roof. The front is to be in glass brick.

The building will have no windows, but will be lighted, heated and given humidity control through modern equipment. The offices will be in the right front of the building. The first section of the plant, proceeding from the front, will be given over to the throwing equipment. Finished products of this department will feed directly into the weave room at the rear and woven goods will be assembled for finishing, packing and shipping in commodious departments on the right rear.

Air conditioning in the throwing and weaving departments will be provided from separate equipment.

Sufficient ground was acquired to permit indefinite expansion of manufacturing operations. Expansion in the first unit can be arranged without disturbing the production system. The rear wall of the weaving department will be of a temporary nature to permit easy enlargement, and additional room in the throwing mill can be secured in similar manner by expansion to the left side.

GREENVILLE, S. C.—In connection with their general improvement program launched several months ago, American Spinning Company will install 17,400 new warp spindles with long draft attachments and other new machinery in the near future, according to Allen F. Johnson, president.

Remodeling of the entire mill was begun about two months ago and a new toilet tower was built. In addition, changes have been made in the steam plant and a refrigeration system will be installed, with drinking fountains on all floors.

The partitions between the three main buildings are being torn out and the entire mill will be housed in one long building. The entire program, including new machinery, will cost about $250,000, Mr. Johnson said.

The plant is now known as the American Spinning Division of the Florence Mills.

REIDSVILLE, N. C.—A new hosiery manufacturing company with an annual payroll of approximately $50,000 will be in operation in Reidsville within the next 60 days.

The plant will be incorporated under North Carolina laws and named sometime soon. It is to be located in the old Williams-Carter Building, corner of Harris and Morehead streets.

J. E. McGovern, an executive of the company which was formerly located at Hacketstown, N. J., said machinery was being moved from New Jersey and that partial operation would be set up within a month. The equipment to be brought here is valued at $75,000.

The plant will manufacture women's full-fashioned silk hosiery with a contemplated output of 500 dozen pairs a week. It is expected to give employment to 50 or more persons to begin with.

Specialists in the making of textile grinding machinery, B. S. Roy is able to keep manufacturing costs down to a minimum---savings that go to every purchaser of Roy equipment.

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Stony Point, N. C.—The Worth Spinning Company is having the Dixie Spindle & Flyer Co., Inc., of Charlotte, N. C., equip their steel rolls with the Guillet taper fitted neck.

Draper, N. C.—The Carolina Cotton & Woolen Mills, bedspread plant, Marshall Field Division, are renting the Guillet overhauling system from the Dixie Spindle & Flyer Co., Inc., Charlotte, N. C.

Danville, Va.—The Riverside and Dan River Mills received another order for broadcloth to be distributed among the WPA workrooms throughout the country. It received an order for a quarter of a million yards to be delivered by December 31st.

The mills received an order for 1,619,000 yards of chambray from the government only a few days ago.

Greenville, S. C.—Dividends amounting to $54,000 on common and preferred stock of the Florence Mills, with which the American Spinning Company was merged on October 1st, were declared at a recent meeting of stockholders and directors in the mill offices at Forest City, N. C. It will be paid January 1st.

The common stock dividend of 3 per cent amounts to $45,000 on shares as of record on December 21st, while the preferred stock divilend of 1¾ per cent totals about $9,000.

Allen F. Johnson, of Greenville, president of the company, submitted his annual report and the following directors were elected:

F. H. Gedney, Crinton Corners, N. Y.; Fred D. Hamrick, Rutherfordton, N. C.; I. E. Harris, Spartanburg; Charles H. Haynes, Cliffside, N. C.; Allen F. Johnson, Greenville; Lott B. Malone, Flushing, N. Y.; John E. Page, Chelsea, Mass.; J. E. Sirrine, Greenville; and John E. Sullivan, Boston, Mass.

Mr. Harris replaced Donald Russell, also of Spartanburg.

Officers were elected as follows: Allen F. Johnson, president and treasurer; Charles H. Haynes, first vice-president; E. O. Steinbach, second vice-president and manager of the Florence Division; J. C. Magarahan, assistant treasurer; Mrs. Lola D. Johnson, secretary; W. L. McBrayer, assistant treasurer.

Sargent, Ga.—The Arnall Mills is busily repainting the 200 houses in the village. Between 30 and 40 of them are being repaired. When this work is completed it will have involved an expenditure of several hundred dollars.

Trion, Ga.—The Trion Company has just purchased two Guillet overhauling systems, one each for their carding and spinning departments, the equipment being furnished by the Dixie Spindle & Flyer Co., Inc., Charlotte, N. C.

Sanford, N. C.—The Sanford Cotton Mills, manufacturers of "Father George" sheetings, are in the midst of a revamping and enlargement campaign.

An addition of concrete and brick construction is being built to the present plant to care for 36 spinning frames. Fire walls in the card room, which formerly separated picking and carding, have been torn out, releasing floor space for expansion in this department. The pickers have been moved to another floor.

Among the new machine and change-over jobs will be revamping of the pickers by Saco-Lowell, super draft fly frames and Casablanca long draft spinning by Whitin Machine Works, automatic spooling and high speed warping by Barber-Colman, an automatic band machine

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THE KEEVER STARCH CO., COLUMBUS, OHIO

has also been bought. A testing machine for yarn and cloth is to be added.

The number of additional looms to be put in has not been decided definitely at this time, but it is thought that it will be approximately 100. Negoiations are under way for the installation of a Curtis & Marble cloth brushing and shearing machine. Recently a new slasher room was constructed, and an additional slasher was installed.

Huntsville, Ala.—The Dallas Manufacturing Company is having their spinning rolls equipped with the Guillet taper fitted neck, the work being done by Dixie Spindle & Flyer Co., Inc., Charlotte, N. C.

Pelzer, S. C.—The Kendall Company, which has purchased the stock of the Pelzer Manufacturing Company, at Pelzer, will make extensive improvements in plant and machinery of the mill.

The improvements will include some new machinery and other modernization improvements, it was said.

The engineering firm of Lockwood-Greene with a branch in Spartanburg has been assigned the survey and supervision of the improvements.

The Kendall interests are expected to take charge of the plant by January 1st.

J. F. Blackmon will remain as resident executive of the plant, it has been announced.

The plant employs about 6,000 workers, has 136,356 spindles and 2,500 looms, and was erected by Capt. Ellison A. Smythe of Flat Rock, N. C., a pioneer textile manufacturer of this section of the South.

Captain Smythe operated the plant for several years and then sold it to the New England and Southern Company, who had charge of operations in conjunction with Lockwood-Greene.

For some time the plant has been operated under the supervision of trustees, and has maintained a regular schedule, except during a strike several months ago.

The Kendall Company owns mills in Camden, Edgefield and Newberry, in this State, and at Wampole, Mass. It also operates as a subsidiary the Bauer & Black Co., widely known manufacturers of surgical dressings and supplies.

Kings Mountain, N. C.—Stockholders of the Dilling Mills Company have accepted an offer of $125,000 by the Phoenix Mill Company, also of Kings Mountain, for the Dilling property.

The bid was submitted by Earl Hamrick, president and secretary of the Phoenix Company, at auction. Phoenix officials have not disclosed plans for future operation of the Dilling plant, idle for several months, but it is understood locally that early resumption is contemplated.

The Dilling Mills Company, whose liquidation was voluntary, was headed by A. G. Myers of Gastonia. Its property consisted of 83 acres of land, two mill buildings, two warehouses, 103 tenement houses, and all machinery in the mill buildings. One of the units manufactured rayon dress goods, while the other made cotton yarn. The mills have 14,192 spindles and 322 looms.

A Competent Basketball Coach

We are in touch with a former member of a Notre Dame University basketball squad who would like to coach a cotton mill basketball team during the coming season. He is willing to do any mill work which may be assigned to him during the term of his coaching.

He is a young man of exceptionally fine personality and was a Notre Dame football star as well as being an expert basketball players.

He has had experience as a coach. Anyone interested should address this paper.

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Textile Waterproofing Agents

Test methods employed by the Textile Finishing Fellowship at Mellon Institute of Industrial Research, Pittsburgh, Pa., in the development of improved waterproofing preparations for open fabrics, are described in a publication that is being distributed gratis to interested companies and specialists.

In the theoretical discussion, the distinction between water repellency and waterproofness is emphasized. Water repellency is resistance to wetting, a surface property. Waterproofness is resistance to penetration by water, and, in open fabrics, depends not only on the water repellency of the thread surfaces, but also upon other physical properties of the cloth, particularly the size of the largest openings through it. The measure of water repellency is the effective adhesion tension of the repellent surface, which is revealed by the magnitude of its equilibrium contact angle. The characteristics of contact angles are discussed. Water repellency varies with surface roughness, which is very high for fibrous surfaces, and modifications of the theoretical equations for wetting action required to adapt them to rough surfaces are considered. The tilting-plate principle is employed in a convenient and dependable experimental method for measuring and comparing contact angles of water against different solids. Effective adhesion tensions for various waxes, gums, metallic soaps and other compounds are reported. For the measurement of waterproofness in lightweight open fabrics, a hydrostatic pressure method is used. The apparatus is that of Barr. The pressure head is increased at the rate of 1.5 to 2.5 cm. per min. and premature leakage at the clamped edge of the test piece is prevented by the use of rings of adhesive tape. The method of recording and analyzing the test data to arrive at a numerical rating for the waterproofness of the fabric is explained in detail.

GASTONIA, N. C.—Judge E. Yates Webb of the Western Federal District of North Carolina signed an order permitting A. G. Myers, receiver of Textiles, Inc., to borrow up to $500,000 for the operation of the corporation.

The order said that Mr. Myers could also borrow, at future times, up to $250,000 to be used in the operation. In the petition for the order, Mr. Myers stated that the money is needed to purchase cotton to fill orders within the next few months.

Orders have already been received, the petition stated, making necessary the cotton purchases.

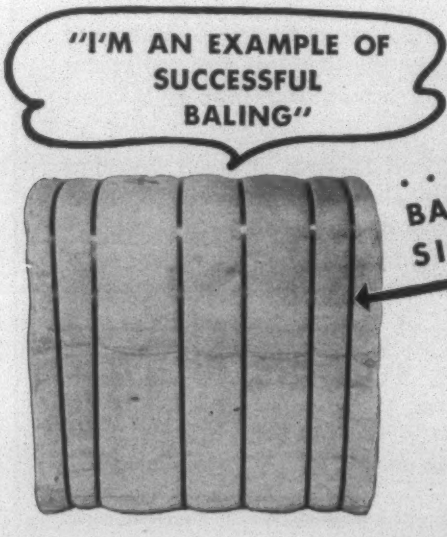
Pacific Leases Amoskeag Plants

Lawrence, Mass.—As officials of the Pacific Mills continued their preparation for the early opening of the four mills they leased from Amoskeag Industries, Inc., it was learned that the executive force has been practically completed.

With the exception of Supt. W. A. Lang and a few key men who will be brought here from Lawrence, the remainder of the men to be employed in the Jefferson, Bag, Amory and Langdon Mills will be Manchester residents. Former Amoskeag overseers have been contacted for similar positions with the Manchester division of the Pacific Mills.

Although it is not yet known just when the mills will be opened, it is believed that within a week or ten days operations will begin. It is the plan of Pacific officials to gradually increase the payroll to about 1,500 by January 1st. Later it is expected that the total number employed may reach 2,500.

Roanoke, Va.—Construction of a new and larger plant by the Blue Ridge Overall Company at Christiansburg, Va., is made known by Carroll Rosenbloom, of Roanoke, treasurer of the company. Mr. Rosenbloom also stated that the number of employees at Christiansburg would be increased from 400 to approximately 650.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Group To Confer With Japanese Textile Interests

DIRECT discussion with Japanese cotton textile interests of a basis for solution of the Japanese cotton imports problem, an effort probably unprecedented in international trade relations, will be undertaken by a group of American cotton manufacturers which, headed by Dr. Claudius T. Murchison, president of the Cotton-Textile Institute, will sail for Japan from San Francisco, December 24th, on the Chichibu Maru.

Members of the group, in addition to Dr. Murchison, will be Donald Comer, president of the Avondale Mills in Alabama and president of the American Cotton Manufacturers' Association, Southern cotton mill organizatition; Casan Callaway, chairman of Callaway Mills, LaGrange, Ga.; Harry L. Bailey, president of Wellington, Sears Company, New York City; and Hervey Kent, treasurer of Exter Manufacturing Company, Exeter, N. H. It is now planned that about two weeks will be spent in Japan, the present itinerary providing for return to the United States early in February. Robt. W. Philip, editor of *Cotton,* will accompany the group as secretary.

Approved unofficially by both governments, the mission hopes to achieve a mutual understanding by the United States and Japanese industries of their respective problems which can ultimately be translated into a practicable, voluntary agreement by the Japanese to establish their cotton goods shipments to this country on reasonable bases of volume, price and distribution.

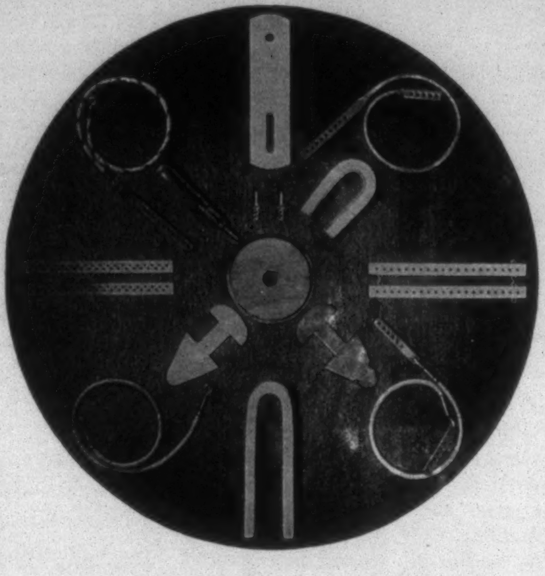
Discussions between the two industries were first proposed by Dr. Murchison last spring following the collapse of diplomatic negotiations for a "gentlemen's agreement" initiated by the State Department. The failure to obtain an agreement was attributed in some quarters to misunderstanding of the problem by the Japanese industry and the result was the presidential order, effective June 20th, increasing by an average of 42 per cent the customs duties on those cotton fabric comprising the bulk of Japanese shipments to the United States.

The growing conviction, in the light of experience since the tariff increase that any protection available under existing law would be ineffective against the wide disparity between Japanese and United States labor and other production costs, as well as realization both here and in Japan that the only alternative to voluntary action by the Japanese may be definitely discriminatory legislation by Congress, stimulated interest in the proposed mission.

The unofficial character of the mission was emphasized particularly by Dr. Murchison, who pointed out that members of the group have no authority to commit the domectic industry to any agreement and that all of them are making the journey at their own expense.

FAYETTEVILLE, TENN.—The Dixie Spindle & Flyer Co., Inc., Charlotte, N. C., are overhauling the machinery of the Elk Cotton Mills, using the Guillet overhauling system.

Rice Dobby Chain Co.



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WANTED—Overseer of weaving; one familiar with Osnaburgs and Single and Double Filling Ducks in widths from 29 to 72 inches. Prefer man not over 40 years of age. Please state habits and qualifications, giving references, also salary desired, in letter of application. Address "X. X. X.," care Textile Bulletin.

WANTED—An A No. 1 Loom Fixer and Overhauler for 40-inch Stafford looms. We have several months work for the right man. State reference and wages expected in first letter. Arthur W. Roper, Supt., Indiana Cotton Mills, Cannelton, Ind.

WANTED—Position as superintendent or overseer weaving; age 32; experienced on both plain and fancy weaving. At present employed as superintendent of weaving. Address "Weaving," care Textile Bulletin.

Plants Are Improved

Saluda, S. C.—H. Zoob, president of the Nantex plant, was here from New York this week to personally look after the improvements of the garment factory. Plans have been made to install steam heat in the factory's quarters. At the same time, plans are already under way for installing a sprinkler system in the plant.

For these improvements the Nantex Manufacturing Company is paying out about $3,000. Further improvement and enlargement of the local plant is to be expected as soon as additional quarters for warehouse space can be arranged, leaving more space in the present quarters for installing machinery and other needed improvements.

By the first of January, the plant here will give employment to 200 persons. As soon as additional floor space can be arranged, the capacity of the Nantex plant here will be increased to give employment to a total of close to 300 persons.

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Textile Exports To Canada Rising

Washington.—Sales of American textiles in Canada, which had fallen off sharply in recent years, have come back strongly since promulgation of the reciprocal trade agreement between the United States and that country, according to an analysis of the first half-year period under the reciprocal pact published by the State Department. The agreement went into effect January 1st of this year.

In addition to large gains in textile sales to the Dominion, raw cotton and linters from the United States, which were assured against imposition of any duty by the treaty, recorded increased sales in Canada from January to June of about 45,000 bales, with an increased value of $1,900,000, the report said.

Since only moderate reductions in duty were obtainable on many classes of textiles under the pact, the sizable gains of Canadian imports from the United States during the first half-year of its operation are significant.

Cotton piece goods, of which the Dominion imported $1,022,000 worth during the first six months of 1935, accounted for $1,234,000 of her imports during the same period of 1936, a gain of $212,000.

Spun Rayon

(*Continued from Page 7*)

wool, has increased rayon and staple production until she is second only to the United States, and if all present plans are allowed to go through she will be the largest producer of rayon in the world.

England is a pioneer producer and spinner of rayon staple. Her government is not nationalistic in the sense of the other three, and her interest in spun rayon was not forced from that direction. England has some cotton but not enough, and in her colonies has the largest wool crop. Her interest in spun rayon arose from mills with idle spinning machinery looking for something new to run. The advance of spun rayon fabrics in England has been rapid and on a sound basis, but since it moves in an open market and not in a closed one as on the continent, the volume has not reached the proportions of the other countries mentioned.

In the United States our situation is somewhat similar to that in England. We have the largest cotton crop as they have wool, and we fill out with home grown wool as they do with colonial cotton. We have idle spinning machinery which is indifferent to the natural fibers, and the new fiber offers a challenge to the pioneer spirit and a new field for operations.

There have already been setbacks by the reactions against unsound constructions or finishes in this country, and there will undoubtedly be more brought about by those who manufacture by rule of thumb and sell at any price bid. Consumer reaction against such fabrics will retard the progress of the entire industry, but the constructive efforts of the mills in the business to stay will gradually overcome the handicap. A large responsibility rests on the converter in the selection of good constructions, in learning first what the good constructions are, of keeping informed on finishing methods and specifications, and in wise pricing. There are no real standards yet, spun rayon is still new, but the foundations of a great and prosperous industry are being laid right now. In 1934 the world production of rayon staple was 53,000,000 pounds. In 1935 it was 133,000,000 pounds. This year will end with a total considerably larger. In our country the production last year was about 5,000,000 pounds. This year it will total 10,000,000 pounds, and next year it will reach a rate of three times that amount. An equally promising prospect is enjoyed by the mills and merchants who are studying what has been done with spun rayon, what can be done with it, and who are going ahead and putting it into practice.

LANGDALE, ALA.—West Point Manufacturing Company, Langdale plant, is having The Textile Shop, Spartanburg, S. C., install their patented vacuum lint and dust collector on their automatic spoolers.

FAIRFAX, ALA.—The Fairfax Mill of West Point Manufacturing Company has purchased a Guillet overhauling system from the Dixie Spindle & Flyer Co., Inc., Charlotte, N. C.

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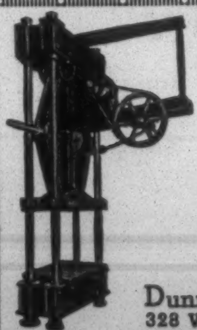

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CALGON

The Only Complete Water Normalizer

Chemicals, Oils, Soaps

Charlotte Chemical Laboratories
Incorporated
CHARLOTTE, N. C.

Meeting of Gaston County Division

(*Continued from Page 21*)

dous compression of the cotton? You know sometimes you can hardly dig it apart with your fingers.

Mr. Ceresole: No, that is not responsible. There are two factors. A gin there is a large concern. Probably the smallest one has 40 or 50 gin stands in it. So the ginning is much better regulated. The cotton goes through two packings. All the cotton in Egypt goes through Alexandria, and they are able to pay out a good deal in preparing it for shipment to the mills. All the cotton moves out from Alexandria by water, and the freight always on ships is by the cubic foot and not by weight. So that is how they happened to start putting the cotton up in those very hard-packed bales. The cotton is compressed first by hydraulic pressure and then by steam. That is how you get that very hard bale. You can not stick a knife into it, much less your finger. I do not think it damages the cotton, provided you let it stay opened up long enough before running it. Take the bands off the bale and let the cotton fluff up in the picker room. Anybody that tries to run Egyptian cotton right out of the bale is going to have the devil of a hard time.

CHARACTER OF COTTON

Question: Sometimes in Georgia and Tennessee cotton we find a bale that looks dullish—the cotton looks dullish. What is the matter with that?

Mr. Julian: We speak of that as the character of the cotton. No one has ever been able to define that word, as applied to cotton.

Mr. A.: We get cotton from the lower part of South Carolina, 1 1/32-inch cotton, and also get cotton from the eastern part of this State, and we find that the cotton from here has more character to it, more body, than that from the lower part of South Carolina. I thought the soil might have something to do with it.

Mr. Julian: I guess the fertility of the soil has something to do with it. If the cotton does not mature when it should the character will be affected.

In talking with Delta farmers, they have said that since the Government has been building levees they do not have as good yields of cotton, because it was the overflowing of the Delta lands that caused their fertility.

Mr. Winget: Sometimes the poor character of cotton is due to run-down seed.

Mr. Julian: Yes. The great thing Mr. Coker has done is to develop improved seed. That is why, when gins selling seed mix up the seed, the farmer gets poor seed and the staple gets shorter and shorter. If the farmer plants the same seed year after year the staple will get shorter. He should get new seed from time to time.

Chairman: By making the proper selections from the best types of cotton they have?

Mr. Julian: Yes. You can get that fact from your first experience in using Carolina cotton in the mill. You know 15 years ago Carolina cotton had no standing. Today I think Carolina cotton is a little superior. You may not agree with me, but I think Mr. Ceresole will.

Mr. Ceresole: There has been a remarkable improvement.

Chairman: And the Delta cotton has deteriorated?

Mr. Julian: I think it is unfair to say that it has deteriorated. The boll weevil had a lot to do with planting short staple cotton in the Delta, because they wanted a cotton that would mature early.

Mr. Richie: I should like to ask Mr. Ceresole how far we should blend cotton before it hits the finisher picker. Can we go further with our blending?

Advantages of Blending

Chairman: I thought one of the most significant statements Mr. Ceresole made was the story of how the Egyptians blend their cotton. He spoke about their taking two hundred bales and blending it all the way through. We have wondered how the Egyptians could produce cotton so much more uniform than ours. The secret is that blending.

Mr. Ceresole: Blending has its disadvantages, too. When the blending is done in the country of origin you are pretty much in the power of the man with whom you are dealing. That is where a good reputation is very valuable. From the mills' point of view, the shipper they deal with has a great deal to do with it. Japan required blended cotton which consisted of pretty cheap upgrade cotton. In that they wanted reginned cotton mixed in about half and half. They wanted to know if we could put it up that way. Well, we did. We sent out types and then trial bales and then made some shipments of it. The Japanese are wonderful mixers, you know. The way in which they mix cottons in their mills is almost inconceivable. We found in making that blend for them that we could not tell the 1-inch cotton in there until it got up to about 10 or 12 per cent.

Mr. Julian: I know that unless you know your dealer over there you will get an awful lot of water in your cotton.

Mr. Ceresole: Do you know why they do that?

Mr. Julian: Yes, so they can compress it.

Mr. Ceresole: They can not put more than a certain amount of moisture in. If they put too much in it will make caked spots in there, which will be absolute waste. The Egyptian shipper has to guarantee a certain percentage of moisture in the cotton. He has to put in enough, because that is a very, very hot country over there, and he will lose if he does not put in enough.

Guaranteed Moisture Contact

This is what happened last year with a mill in Canada that uses quite a lot of Egyptian cotton and also quite a lot of Delta staple. They found some Egyptian shipments were coming in with too much water in the cotton. They made careful tests when the cotton came in, and they determined to buy on guaranteed-moisture-content terms. There are official testing houses in Egypt where you can send samples and have them tested by a third party. This mill wanted to get moisture-tested cotton, but the sellers refused to sell to them that way; I was the only one who would agree to it. I told him I would take his tests on it and told him I would let the moisture content go to not over 8.9 per cent. Each time the test came out less than that, except once when it was 9.1, which was a difference of only 0.2 per cent. I knew that his tests are made correctly. He is very grateful to me, because it enabled him to get the others in line. Now he is absolutely hipped on that and is testing every lot of American cotton. He is making tire fabric, and his moisture allowance on that is 6.0. He knew on Egyptian cotton he had something definite to go by, but on peeler cotton he had nothing. Sometimes the moisture would run 12 per cent. That is an awful lot of moisture.

Question: In buying cotton from the new crop now, is it true that the staple may show a little longer than it would next year?

Mr. Julian: It is true that if you pull the staple now it may be 1 7/32-inch, and if you pull the staple from the same bale next June it may be only 1 5/32-inch. That is due to deterioration of the staple, due to drying out.

When Spinning Goes Bad

The discussion was resumed at this point with the question, *"When the spinning begins to run badly, what do you do to find the trouble?"*

Mr. Whitener: I would be looking for a lot of different things, I guess.

Chairman: What would you blame it on?

Mr. Long: The cotton.

Mr. Cauble: I think it might be the local conditions there. It might be the humidity; it might be the cotton.

(Continued on Page 36)

TWELFTH
SOUTHERN TEXTILE
EXPOSITION

Textile Hall
Greenville, S. C.
April 5 to 10, 1937

New and improved machinery, installations, accessories, and supplies will be shown by the leading manufacturers of America.

Interesting technical meetings will be held during show week.

Low railroad rates are now in effect. From Greensboro on the north, and Atlanta on the south, there will be nightly Pullman service. These cars will be parked in Greenville next day, and returned at midnight.

Travelers by automobile will find improved highways from every section of the South.

Please write Housing Committee for room reservations. All visitors may obtain comfortable quarters.

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Remember The Dates

April 5 to 10, 1937

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Textile Mill Scrubbing Powder

Is made of the finest ingredients,
To work perfectly in cold water,
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To leave no slippery film on floors.

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GARLAND
LOOM PICKERS and
LOOM HARNESSES
GARLAND MFG CO.
SACO, ME.
G

Cotton Goods Markets

New York.—Although sales for future delivery were somewhat smaller, business in the cotton goods markets continued very active during the past week.. Sales of print cloths were estimated at about 150 per cent of production. There was a very strong demand for spot and prompt shipment, with available supplies running so low, with prices running equal in first and second hands.

In print cloths it was reported that the 39-inch 4-yard 80 squares had sold at 11½c for spots, with contracts selling all the way down to 9¾c and business at one time at 9½c for April and forward. March deliveries sold heavily at 10c at the close were generally held at 10¼c.

Trading in sheetings included business on 32-inch 6.25s at 5⅝c for quick deliveries and down to 5¼c for this style for very late deliveries. Shipments next year of the 36-inch 5-yard 48 squares were moved at 6⅝c with 6¾c quoted on the few goods available within the year. There was business on 40-inch 5.50s at 6⅛c. The 40-inch 2.85s in feeler motion makes were sold at 10c and 9¾c was quoted for non-feelers.

The combed lawns reached into new high ground as several sellers remained withdrawn from the market and those were willing to sell would not take business for late deliveries. There were sales of the 40-inch 8.50-yard 88x80s at 10½c and nearly deliveries and bids at that figure for later contracts were reported turned down. The 40-inch 9-yard were generally held at 9½c.

Rayon gray goods buyers were unable to place any contracts, finding that mills very generally no longer were willing to take future business because of the scarcity of yarns and the fact that a good percentage of their production over the next few months is already sold. There were some sources where spot and quick goods were still available, and by bidding the market up, buyers were able to dig out a few of these. For the most part, mills were refusing to make any quotations, and sales were put through only when buyers, lifting their bids, reached figures which were so tempting that mills were prompted to let out occasional lots of goods.

Print cloths, 27-in., 64x60s	5⅛
Print cloths, 28-in., 64x60s	5⅛
Gray goods, 38½-in., 64x60s	7½
Gray goods, 39-in., 80x80s	10⅛
Gray goods, 39-in., 68x72s	8¾
Tickings, 8-ounce	16½
Denims	14
Brown sheetings, standard	9¾
Brown sheetings, 4-yard, 56x60	8¼
Brown sheetings, 3-yard	9
Dress ginghams	16
Staple ginghams	9

J. P. STEVENS & CO. Inc.
Selling Agents
40 - 46 Leonard St., New York

Cotton Yarn Markets

Philadelphia, Pa.—Yarn consumers showed a very active interest in covering future needs during the week. A number of very large orders were reported during the first half of the week and inquiry was exceedingly active. Prices continued very strong.

Near the end of the week many mills had withdrawn from the market again, pending a revision in prices to take care of wage advances. Others were not interested in further business at the moment, having sold far ahead.

Sales and shipments of both carded weaving and knitting yarns for the first half of November considerably exceeded the showings for any similar period previously back to June-July, 1933, according to leading distributors here, who state that the number of buyers has increased and, in addition, that the average buyer is now intent on covering farther ahead than previously in the last three years. This view is confirmed by the larger proportion of contracts calling for more than 150,000 pounds each. Larger contracts also are noted in ply combed yarn. Sellers claim the larger customers show more confidence than at any previous time since the buying movement began last May. It is added that, mostly, these customers are meeting spinners' price ideas without much delay, while small customers still attempt to put down orders at prices ruling a month ago. Some of the latter are stated to be about 2 cents below the present working prices.

Shipments continue very heavy, with larger consumers already drawing shipments against contracts, which they originally figured would not have to be used until January. The tightness of supply is demonstrated by the emergency faced by some consumers because of delays in yarn arrivals due to holding up of rail-water shipments because of the shipping strikes.

The published lists of yarn rates must still be regarded as nominal—as applying only to yarns involved in delivery obligations which are strictly limited and definitely understood between spinners and their customers.

The following quotations were regarded as nominal:

Southern Single Skeins

8s	25½-__
10s	25½-__
12s	26 -__
14s	26½-__
20s	28 -__
26s	30½-__
30s	33 -__
36s	38 -__
40s	30½-__

Southern Single Warps

10s	25½-__
12s	26 -__
14s	26½-__
16s	27 -__
20s	28 -__
26s	30½-__
30s	33 -33½
40s	30½-__

Southern Two-Ply Chain Warps

8s	26½-__
10s	27 -__
12s	27½-__
16s	28½-__
20s	30 -__
24s	31½-32
26s	33½-__
30s	34½-__
36s	38½-__
40s	40½-__

Southern Two-Ply Skeins

8s	26 -__
10s	26½-__
12s	27 -__
14s	27½-__
16s	28½-__
20s	30 -__
24s	31½-__
26s	33 -__
30s	35 -__
40s	40½-__

Duck Yarns, 3, 4 and 5-Ply

8s	26 -__
10s	26½-__
12s	27 -__
14s	27½-__
16s	28½-__
20s	30½-__

Carpet Yarns

Tinged carpets, 8s, 3 and 4-ply	24 -__
Colored stripe, 8s, 3 and 4-ply	28 -__
White carpets, 8s, 3 and 4-ply	26 -__

Part Waste Insulating Yarns

8s, 1-ply	22½-__
8s, 2, 3 and 4-ply	23½-24½
10s, 2, 3 and 4-ply	25 -__
12s, 2-ply	25½-__
16s, 2-ply	28 -__
30s, 2-ply	33½-__

Southern Frame Cones

8s	24½-__
10s	25 -__
12s	25½-__
14s	26 -__
16s	26½-__
18s	27 -__
20s	27½-__
22s	28½-__
24s	29½-__
26s	30½-__
28s	31½-__
30s	32½-__
40s	38½-__

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NATIONAL RING TRAVELER CO. PROV. R.I. U.S.A.

Meeting of Gaston County Division

(*Continued from Page 33*)

You have to look at the local conditions.

Chairman: I believe Mr. Cauble is right there. We have to look at the humidity and look at the other conditions.

G. A. Lay, Overseer Spinning, A. M. Smyre Mfg. Co., Mill No. 2, Gastonia: I think one of the first things to look after is the weights; then look at the traverse. I know that uneven weights will start the spinning to running badly, especially when it is light.

Mr. Cauble: I believe the humidity is one of the greatest causes.

Mr. Williams: I believe we need to look into our local conditions. For instance, someone might open a window, and the first thing you know your humidity has changed.

Mr. Winget: You are assuming that it has been running all right and suddenly goes to running badly.

Mr. Cauble: I have often put steam in the mill on fine counts up to 120's, and that has helped me numbers of times. Sometimes it would get too damp, and a little steam has helped me quite a lot.

Mr. B.: I look at my weights, look at my humidity, look at the traverse; then, if I don't find anything, I blame it on the cotton.

Mr. Cauble: The travelers and so forth would not cause it all to go bad at once. That would come on gradually.

Preventing Soot on Spinning Frames

Chairman: We will take up the next question, "*How can you prevent soot on spinning bobbins, especially on filling wind?*"

Mr. Richie: I don't know whether I can tell how how to keep it off, but I can tell you how to cover it up. Use warp wind. If you use the warp wind you get away from that; you do not expose your yarn so long as you do in the filling wind. You may not be able to use 3.25; you may have to go down to 2.70. That will eliminate any sooty yarn.

Chairman: That just covers it up or spreads it out; it does not prevent it.

Mr. Winget: Sometimes one thing will prevent it, sometimes another. I have found that you can not have too much humidity in the room, as it will have a tendency to let the air stay down around the spinning too long. I think it helps to crack the windows some and let some of the humidity and heat out. I have tried the warp wind, but it is very difficult to run it off. Some folks say that the soot's getting on the bobbins always happens up around the boiler room, but it does not at my place. Others say it is because the mill is located on a railroad. That is not what causes it with us. Of course, we do have some up next to the boiler room, but we have it all over the room. Some say it happens when they unload coal. We try to keep the windows shut as close as we can, and we use coal only to heat the people who run the mill, so I don't think that can be the cause. I think it can be helped by proper ventilation. If you have the type of ventilator that swings around with the wind it does not have to be opened, because it is always open. I think that would help.

Mr. Richie: If you have a good circulation before you start up your spinning it will not soot nearly as badly. I always have it in mind that if my steam line ran right down under my spindles I would get away from that. I think it is due to a little bit of oil coming down off the bobbin and hanging there, because the heating is uneven.

Mr. Winget: I think that is right, because in summer time, when the windows are open and the heat is uniform from the floor up, we do not have it.

Reverse Warp Wind

Chairman: It was suggested that the reverse warp wind would cover it up. It is there just the same, but it is spread out so that you do not notice it.

The next question is: "*Does reverse warp wind run as well as regular warp or filling wind?*" My answer to that is that I can cover up my soot, but my spinning does not run as well.

Mr. Lay: I can not tell any difference. We have one mill on this reverse warp wind, and I can not tell any difference in the spinning. I can tell some difference in the spooling and winding. Of course, that is on reasonably coarse numbers.

Mr. Winget: When you get to around 60s and 70s and 80s you will not get anywhere with it. At least we did not.

Mr. Lay: The counts I have run from 16s up to 30s on this reverse warp wind.

Mr. Richie: We run 60s. It does not run as well on the spinning and it is harder to get off.

Chairman: I know why it does not do it, but I should like to know some way to overcome it. The trouble is the long space between the ring rail and the traveler. You can not adjust your traveler to a full bobbin and an empty bobbin. Someone tell us how to overcome that.

Mr. C.: Put on separators.

Chairman: Separators are a necessary evil, they say.

Mr. C.: I was in a mill the other day where they had put on separators, and they said it did all right.

Self-Oiling Twister Rings

Chairman: We come now to the next question, "*What results are you getting from self-oiling twister rings?*"

Mr. Winget: We enlarged the size of the ring from 2.0 to 2.5 inches and put in this self-oiling twister ring. We like them very much. They seem well oiled all the time. You get rid of the human element there and have a uniform oiling arrangement. We feel that we do not get quite as much black yarn.

R. B. Price, Overseer Spinning, Winget Mill, Textiles, Inc., Gastonia: We have 12 on them now and consider it worth while.

High Speed Winding

Chairman: Next question, "*Do you get better winding on high-speed or slow-speed winders?*" Which do you get the best results from?

Mr. Whitener: I think you get the best results with a count that is made on a high-speed winder; it will come off that better than it will a low-speed winder. I was speaking from the standpoint of getting it off the cone on a multiple winder. We have less break from the high-speed winder than from the low-speed winder, on single yarns.

Mr. Long: On ply yarn I think the low-speed winder is better.

Mr. Winget: We found we could not run 39 turn on the slow-speed winder but could run it on the fast-speed winder. I think if it gets started it comes off so fast it does not have time to throw a kink in it.

Chairman: I want to agree with Mr. Long that on single yarn it is all right but not on ply yarn.

Mr. D.: There are two gears there that you can change and run your two-ply all right.

Mr. Richie: We have a high-speed twister on which we run two-ply yarn, and we like it very much better than the other.

Visiting The Mills

By Mrs. Ethel Thomas Dabbs (Aunt Becky)

Fountain Inn and Simpsonville, S. C.

The mills at these two places belong to the Woodside group, and R. L. Stutts, a pleasant and courteous young man, is superintendent of both.

At Fountain Inn, a new platform was being built for more convenience in handling shipments of cloth. H. B. Bennett is overseer carding at both mills, which are about five miles apart. He has a 16-year-old son, Clyde Bennett, who weighs 265 pounds. Clyde finished High School last June and has a position in the Simpsonville office, as does his sister.

W .O. Boushillon is overseer spinning at Fountain Inn; W. E. Baker is overseer weaving and cloth room and Mr. Balleau, master mechanic.

At Simpsonville plant, H. B. Bennett is carder; C. D. Huff, spinner; L. A. (Larry) McKay is weaver; G. P. Garrett, overseer the cloth room, and Sam Mabry, master mechanic.

Belton, S. C.—Belton Mills

This pretty village still shows the effects of the terrible storm of a few years ago, which destroyed so many fine shades trees; damaged houses were repaired and are as good as ever. But "only God can make a tree."

Superintendent J. B. Mitchell has been here for several years and is well liked. He and Superintendent P. B. Mitchell of Goldville, S. C., are brothers.

Belton Mills are delightfully clean and roomy. There are 750 operatives happily at work on modern machines and in well ventilated and comfortable quarters. The homes are attractive, and good gardens and pretty flower yards add to the beauty of surroundings.

The overseers are a fine group of gentlemen—all bubbling over with good humor. J. R. Burgess,overseer carding, and J. R. Federline, overseer spinning, have both been here for many years and can turn out more good yarn than seems possible. Mr. Federline has a progressive bunch of young men in his department, among whom are W. E. Bannister, second hand, and J. W. Stevens, second hand.

F. E. Shirley, overseer weaving, is a jolly good scout, with J. M. Stevenson a hustling second hand.

Liberty, S. C.—Easley Cotton Mills, Nos. 2 and 3

These two mills are superintended by A. F. Hedgepath, who has been here for years and knows the job from "A" to "Izzard." The mills have been undergoing some drastic changes; old machinery has been dumped out all around and replaced by better and more modern. These mills, too, have been taken into the Woodside group. J. L. Bobo, overseer weaving at one of the mills, said that when the new company took things over they "found the mills sick—and now they were vomiting out old machinery and getting well fast."

Two years ago the 10th of October, "Uncle Hamp" was called suddenly into the "Great Unknown" while we were in the home of Mr. and Mrs. Bobo, and Liberty will always be a sad though sacred spot to me, haunted by memories of pleasure and pain.

W. E. Smith, overseer spinning, and P. A. Kay, overseer weaving in No. 2, are among our good friends at Liberty. I can write my receipt before I get there even, so sure I am of their subscriptions.

Mr. Bobo, at Milll No. 1, was rejoicing in the fact that 24 additions had just been made to the Baptist Church, and that 28 operatives in the weave room had pledged $507.60, and operatives in carding and spinning, $328, toward the building of six new Sunday School rooms. Mr. Beatty, mill president, contributed handsomely, too. Rev. Lloyd Pace is pastor, and J. A. Reeves, in the weave room, is Sunday School superintendent, assisted by J. L. Bobo.

Fingerville, S. C.—Franklin Process Spinning Mill, Inc.

Any one who thingks that Fingerville is a back number has another think coming. In recent months the mill has undergone a complete renovation and is modernized almost completely throughout.

A. W. Young, superintendent, has been here for several years, and has been remarkably successful in the operation of this plant. The mill was organized around 98 years ago, was burned down in time of the war and rebuilt, and some of the first houses have just recently been torn down. The village is rugged and picturesque—wooded hills and a winding river that sometimes gets on a rampage, and recently washed the dam away. The dam has just been replaced, among other projects that have gone into effect, making a decided improvement in the looks of things.

Long draft spinning and other improved machinery has taken the place of old style work; the girls wear pretty uniforms, and the men are wanting to spruce up, too, so Mr. Young is trying to decide what color uniform to adopt for them. I told him about the nice uniforms worn by the men at Rocky Mount Mills, Rocky Mount, N. C., and he was much interested.

Overseers here all look like superintendents. F. G. Lawis is carder and spinner; R. A. Calvert, winder, and J. B. Bell, master mechanic.

"Aunt Becky" always gets an invitation to dine in the home of Superintendent and Mrs. Young, and it is indeed a treat to get a good home-cooked meal after so much unsavory cafe stuff.

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Compilations of Standards on Textile Materials

In order to make available in their latest approved form all of the 42 A. S. T. M. standards covering various types of textile products the A. S. T. M. has issued a revised and amplified edition of this publication which is sponsored by Committee D-13 on Textile Materials.

In addition to all A. S. T. M. standards on textiles, there are included a proposed potassium dichromate oxidation method for the determination of total iron in asbestos textiles, a psychrometic table for relative humidity which combines both accuracy and convenience to an exceptional degree, a section comprising many excellent photomicrographs of common textile fibers and a convenient yarn number conversion table. Also included are proposed methods covering the testing of wool felt and correction of breaking strength to standard regain.

During the past year, nine outstanding technical papers were presented at meetings of the committee and extensive abstracts of these papers are given in the publication.

The 1936 edition contains for the first time methods of testing applying to pile floor covering; fineness of wool; corded cotton gray goods; yarn slippage in silk, rayon and silk-rayon woven broad goods; and fastness to laundering or domestic washing of dyed or printed cotton fabrics and printed silk or rayon fabrics.

During 1935-1936 changes have been made in standards covering woolen and worsted yarns, definitions and terms, silk and cotton tapes, and test for small amounts of copper and manganese in textiles; also, cotton yarns, cotton sewing threads, asbestos tape, cotton tape, light and sedium cotton fabrics, hose and belt ducks, and methods of testing woven fabrics.

In addition to the above materials a large numbe or other textile products are covered, including: Testing machines, tire fabrics, tire cord, sewing threads, numbered ducks, knit goods, rayon, fabrics (identification), sleeving and braids, Holland cloth, corded cotton goods, sugar bags.

Copies of this 275-page publication can be obtained from A. S. T. M. Headquarters, 260 S. Broad St., Philadelphia, at $2.00, heavy paper binding.

CORDELE, GA.—Construction will begin at once on the Crisp Hosiery Mills, plans for which were previously reported.

President Charles Adams, of the Crisp County Chamber of Commerce, and W. C. Reynolds, president of the Crisp County Development Company, Inc., the owners, announced a contract had been signed for completion of the building by January 21, 1937.

The building will be of glass brick, regular brick and steel.

GAINESVILLE, GA.—The Gainesville Cotton Mills is having The Textile Shop, Spartanburg, S. C., install their patented vacuum lint and dust collector on their automatic spoolers.

Classified Department

WANTED POSITION — Young married man desires position as supply clerk or timekeeper in mill or bookkeeper in mill store. Am experienced in above work and can furnish the best of references. "X. Y. Z.," care Textile Bulletin.

WANTED—Loom fixers and weavers for C. & K. velour looms. "M. C.," care Textile Bulletin.

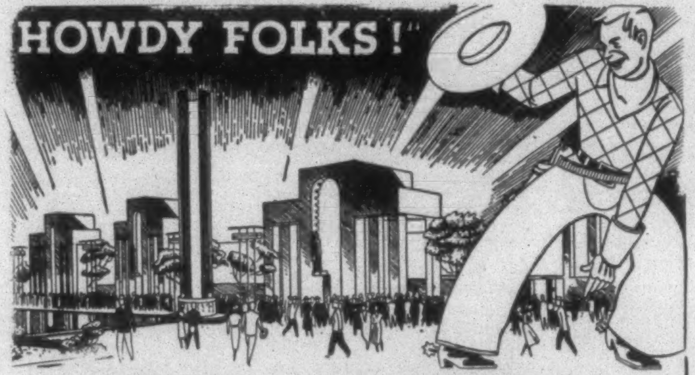
WANTED—Loom fixers and weavers for Wilton Carpet looms, jacquard work. "C. M.," care Textile Bulletin.

WANTED—Extra good card grinder for afternoon shift. Cherry Cotton Mills, Florence, Ala.

WANTED—To contact mill presidents where a change in their superintendent is inevitable. My experience as superintendent and general manager covers a period of twenty-two years. I am fully capable of taking complete charge of a mill making print cloths, shade cloth, twills, wide and narrow sheetings, broadcloth, or number duck. All correspondence and interviews strictly confidential. Reference available from past employers. "D. N.," care Textile Bulletin.

WANTED—Position as master mechanic, 16 years' experience; age 41. Address Experienced, care Textile Bulletin.

WANTED POSITION—Young man, single, sober, experienced in shipping, sizing, billing, payroll work, textile industry. References from present employer. General office work. "X. Z. R.," care Textile Bulletin.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Cotton Mill Activity Last Month

Washington.—The cotton spinning industry was reported by the Census Bureau to have operated during October at 123.3 per cent of capacity, compared with 125.8 per cent during September this year ,and 103.8 per cent during October last year.

Spinning spindles in place October 31st totaled 27,911,666, of which 23,638,270 were active at some time during the month, compared with 27,962,666 and 23,514,270 for September this year, and 29,565,536 and 23,192,602 for October last year.

Active spindle hours for October totaled 8,328,468,743 or an average of 298 hours per spindle in place, compared with 8,088,255,427 and 289 for September this year, and 7,445,185,686 and 251 for October last year.

Spinning spindles in place October 31st in cotton-growing States totaled 19,017,368, of which 17,372,302 were active at some time during the month compared with 18,997,204 and 17,318,738 for September this year, and 19,305,554 and 16,995,194 for October last year.

Southern Sources of Supply

For Equipment, Parts, Material, Service

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information service, equipment, parts and materials, and believe this guide will prove of real value to our subscribers.

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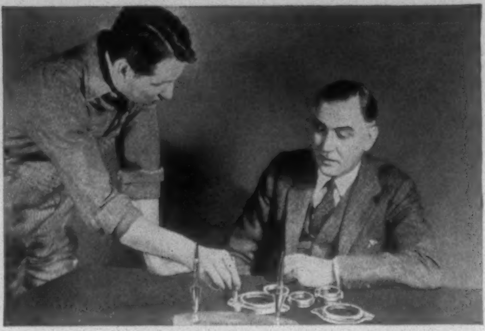

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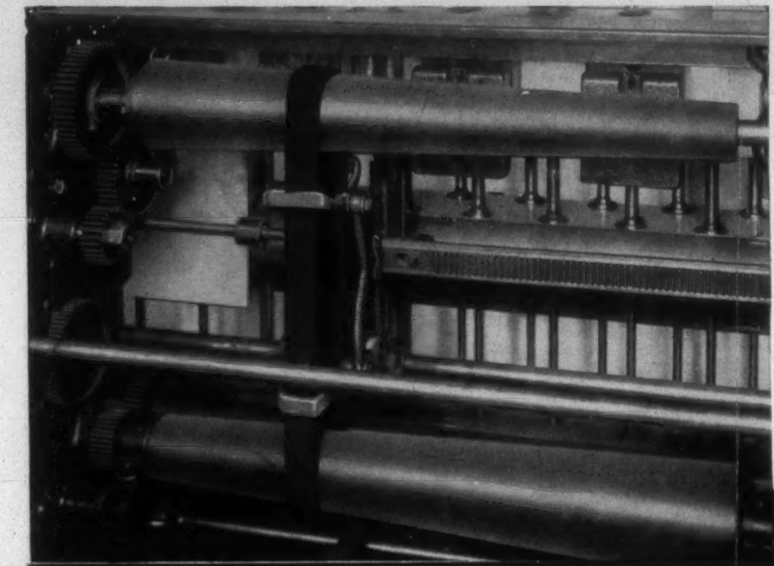

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